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SOMMAIRE / CONTENTS

ARTICLES ET ÉTUDES / ARTICLES AND STUDIES

VASILICA-MONICA GROZA, LUMINIȚA BEJENARU, ANGELA SIMALCSIK, <i>Skeletal Abnormalities in the Urban Population of Iași (Iași County, Romania): Paleopathological Data on the Necropolis Discovered in the Princely Court, 17th Century</i>	3
ELEONORA LUCA, GEORGETA BADRAJAN, A. SAVU, C. VULPE, M. ȘT. CIUHUȚA, MONICA PETRESCU, N. LEASEVICI <i>Aspects concernant l'étude mixte-longitudinale de la croissance des enfants et adolescents de Bucarest et du Couloir Bran-Rucăr</i>	17
CORNELIU VULPE, ELEONORA LUCA, MONICA PETRESCU, <i>Répartition du facteur RH dans la population roumaine</i>	33
ALEXANDRA NEAGU, <i>Body Image Dimensions among Romanian Adolescents</i>	41
CRISTIANA GLAVCE, ADRIANA BOROSANU, RICHARD DAVID-RUS, <i>A Study on Adolescents' Perception of the Family's Food-Sources from Two Cities in South Romania</i>	59
ILINCA DAMIAN, <i>Meanings as Culturally Bound Objects. A Possible Position</i>	75

RAPPORT DE RECHERCHE / RESEARCH REPORT

GABRIEL STOICIU, <i>Occupy the Cyberspace. The Sophistication of Protest Movements through Virtual Communities' Effort</i>	89
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ANN. ROUM. ANTHROPOL., 52, P. 1–120, BUCAREST, 2015

IN MEMORIAM

<i>Dr. Theodor Enăchescu (1919–2014), (Obituaire par / An obituary by Eleonora Luca).....</i>	99
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COMPTES RENDUS / BOOK REVIEWS

Cornelia Rada, Cristina Faludi (Coordinators)	
<i>Funcții și disfuncții ale familiei contemporane. O abordare socio-psiho-medicală</i> [Functions and Dysfunctions of the Contemporary Family. A Socio-psycho-medical Approach], București: Editura Universitară, 2015, 240, pp.	
(Review by Adina Baciuc)	103
Michael Ruse	
<i>The Philosophy of Human Evolution</i> , Cambridge, New York: Cambridge University Press, 2012, x+282 pp.	
(Review by Richard David-Rus)	104
Judith Okely	
<i>Anthropological Practice Fieldwork and the Ethnographic Method</i> , Bloomsbury, London and New York, 2012, xii+200 pp.	
(Review by Sebastian Ștefănuță)	107
Ion H. Ciubotaru	
<i>Obiceiurile funebre din Moldova în context național</i> [Funerary Customs in Moldavia, within the Romanian National Context], “Alexandru Ioan Cuza” University of Iași Publishing House, 2014, 762 pp.	
(Review by Marin Constantin)	112
Joy Hendry, Simon Underdown	
<i>Anthropology. A Beginner's Guide</i> , Onworld Publications, Oxford, England, 2012, 207 pp.	
(Review by Marin Constantin)	115
Marshall Sahlins	
<i>What Kinship Is – And Is Not</i> , The University of Chicago Press, Chicago and London, 2013, 110 pp.	
(Review by Marin Constantin)	118

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SKELETAL ABNORMALITIES IN THE URBAN POPULATION
OF IAȘI (IAȘI COUNTY, ROMANIA): PALEOPATHOLOGICAL
DATA ON THE NECROPOLIS DISCOVERED
IN THE PRINCELY COURT,
17TH CENTURY

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This paper presents the prevalence and study of abnormalities in a skeletal series exhumed from the necropolis of the former Princely Court of Iași City (Iași County, Romania). The necropolis, discovered in 2008 and dated in the 17th century, consists of 111 human skeletons (adolescents, adults, mature and senile) found in 60 inhumation tombs (individual and collective). The distribution on age and sex categories reveals a high prevalence of adult males. The frequency of abnormalities was estimated both separately on sexes and for the entire osteological series. In the cranial segment, wormian bones have a rate of 27.47%, metopic suture has 7.69%, whereas hypodontia is present in only 2.22% of the cases. As regards the postcranial segment, the lumbarization has the highest incidence (15.38%), followed by sacralization (13.18%) and spina bifida occulta (6.59%). Other abnormalities have sporadic occurrences.

Key-words: skeletal abnormalities, necropolis, Iași City, 17th century.

Skeletal abnormalities represent deviations from the normal structure derived from the disturbance of the chemical and metabolic processes under the influence of exogenous factors. However, they can also be determined by genetic or teratogenic factors (Gregg and Gregg 1987). Skeletal abnormalities can appear prenatally or following birth and the degree of severity varies from mild forms to extremely severe and sometimes lethal cases (Barnes 1994; Masnicová and Beňuš 2003). These abnormalities are present in the cranial segment, in the spine and in the appendicular skeleton (Marcsik *et al.* 2002). The highest incidence of skeletal abnormalities in historical populations is encountered in the spine (most frequently

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in the lumbosacral region); there is a lower incidence in the cranial segment and a very low incidence in the appendicular skeleton (Zimmerman and Kelley 1982; Barnes 1994).

The greatest majority of the abnormalities encountered in the human skeleton refer to osseous fusion, ossification, underdevelopment and agenesis; all of these are reported in several prehistorical and historical osteological series unearthed all over the world (Zimmerman and Kelley 1982).

The archaeological research conducted in 2008 by Stela Cheptea, principal archaeologist at the Centre for European History and Civilization of Iași, in the eastern part of the former Princely Court [in Romanian, *Curtea Domnească*] situated in the central area of Iași City (Iași County, Romania), led to the discovery of a necropolis with 111 human skeletons found in 60 inhumation tombs (individual and collective). Details of the archaeological contexts have not yet been published.

This osteological series represents a segment of the population which inhabited the city of Iași during the 17th century, and the main purpose of this study is to analyze the incidence of some skeletal abnormalities.

MATERIAL AND METHODS

The paleoanthropological sample is represented by 111 human skeletons unearthed from 60 inhumation tombs (37 individual tombs, 7 double tombs, 6 tombs with 3 skeletons each, 8 tombs with 4 skeletons each and 2 tombs with 5 skeletons each), of which 107 skeletons belonged to adults and 4 skeletons belonged to adolescents. Their good preservation and the restoration potential allowed a relatively complete study.

The skeletons were washed, marked and restored. In the assessment of the age at death for young individuals we analyzed the dental development, according to the methods proposed by Ubelaker (1979), Schaefer *et al.* (2009). We also took into account the epiphyseal ossification, the size of the long bones, according to Scheuer *et al.* (2000), Trotter and Peterson (1969), Fazekas and Kosa (1978). In order to establish the sex and the age at death for the adult subjects (over 18 years) we used the methods, criteria and techniques recommended by Ubelaker (1980), Brothwell (1981), Mays (1998), Bruzek (2002), Walrath *et al.* (2004), Schmitt (2005).

The cranial and postcranial abnormalities were identified and analysed according to the methods, criteria and techniques recommended by Mays (1998), Sloomweg (2007), Kimmerle and Baraybar (2008), Waldron (2009), Ortner (2003), Aufderheide and Rodriguez-Martin (1998), Barnes (1994). The incidence percentages have been evaluated by reporting the number of abnormalities to the total number of the corresponding skeletal segments, as following: wormian bones, metopic suture and atlanto-occipital fusion to the total number of craniums; hypodontia to the total number of mandibles; Klippel-Feil syndrome and lumbar vertebra with bilateral spondylolysis to the total number of skeletons; thoracic

vertebra block to the total number of thoracic spine; sacralization, lumbarization, and *sacral spina bifida occulta* to the total number of sacra; *spina bifida atlantis posterior* to the total number of atlas vertebrae.

RESULTS AND DISCUSSION

From the total of 111 human skeletons unearthed from the necropolis of the Princely Court (17th century) of Iași City, 4 subjects were young (*juvenis*), whereas 107 (78 males and 29 females) were past the age of 18 (*adultus, maturus, senilis*). We have not identified individuals with ages in the interval 0-14 years. In the category of 18-29 years, the subjects' frequency amounts to 28.82%, with higher rate in the case of males; in the interval of 30-49 years, the frequency of individuals is of 58.55%, and in the interval of 50-x years we recorded ten cases (9.00%) – seven in males and three in females.

The prevalence of various skeletal abnormalities in the studied sample is represented in Table 1; it was calculated both separately, on sexes (78 males and 29 females), and for the entire osteological series (111 specimens).

Table 1

Incidence of abnormalities in the skeletal series unearthed from the necropolis of Princely Court of Iași City (17th century)

Abnormalities		Males		Females		Total	
		presence		presence		presence	
		no.	%	no.	%	no.	%
Cranial segment	Wormian bones*	18	25.71	7	33.33	25	27.47
	Metopic suture*	3	4.28	4	19.04	7	7.69
	Hypodontia**	1	1.42	1	5	2	2.22
	Total	22	-	12	-	34	-
Postcranial segment	Atlanto-occipital fusion*	0	0	1	4.76	1	1.09
	Klippel-Feil syndrome***	0	0	1	3.22	1	0.90
	Thoracic vertebra block (T4+T5) ****	1	1.25	0	0	1	0.92
	Lumbar vertebra with bilateral spondylolysis***	1	1.25	1	3.22	2	1.80
	Sacralization*****	10	15.15	2	8	12	13.18
	Lumbarization*****	7	10.60	7	28	14	15.38
	<i>Spina bifida atlantis posterior</i> *****	2	2.50	0	0	2	1.85
	<i>Sacral spina bifida occulta</i> *****	5	7.57	1	4	6	6.59
	Total	26	-	13	-	39	-

* incidence reported to the total number of craniums (91);

** incidence reported to the total number of mandibles (90);

*** incidence reported to the total number of skeletons (111)

**** incidence reported to the total number of thoracic spine (108);

***** incidence reported to the total number of sacra (91);

***** incidence reported to the total number of atlas vertebrae (108).

Wormian bones. Also known as intersutural bones or Inca bones, they can be defined as small sized formations of irregular shapes encountered in the cranial sutures. According to Bergman *et al.* (1988), approximately 40% of the skulls have intersutural bones nearby the lambdoid suture or on the sagittal suture, close to the lambda point. The presence of sutural bones can be associated, in some situations, with other abnormalities of central nervous system or skull (Das *et al.* 2005).

In the skeletal series unearthed from the necropolis of the ancient Princely Court of Iași, wormian bones were identified in 25 subjects (18 males and seven females) aged between 18 and 55 years. A special case was discovered in a male aged between 30 and 35 years (M 63), who had a large wormian bone (52 mm long and 35 mm wide) on the lambdoid suture (Figure 1).

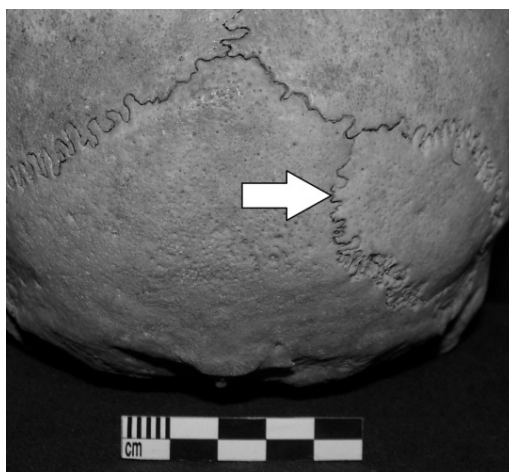


Figure 1. M 63, ♂, 30-35 years: wormian bone on the lambdoid suture.

Metopic suture. The metopic suture is an anterior extension of the sagittal suture. The fusion of the metopic suture begins at the glabella, it continues progressively in the upper area and it ends at the anterior fontanelle (Weinzweig *et al.* 2003). Ordinarily, this suture closes between the first and the second year of life and is completely closed before the subject reaches the age of three; however, it can sometimes stay open until the age of seven. There are also sporadic cases when the metopic suture remains open throughout life and it can be observed even in old people (Ide *et al.* 2003). The persistent metopic suture can be ascribed to several causes, such as: abnormal growth of the cranial bones, pathologic metopism caused by hydrocephaly, growth interruption, heredospecific factors, heredity, atavism, etc. The genetic influence is currently the most important factor accepted by the scientific community (Castilho *et al.* 2006).

In the scholarly literature, the persistent metopic suture was reported with frequencies ranging between 1% and 12% of the cases (Skrzat *et al.* 2004). The

incidence of the metopic suture is slightly higher in the male cases (1.84%) compared to females (1.62%) and it is more frequently encountered in people living in rural areas compared to those living in urban areas (Baaten *et al.* 2003).

In the analyzed series, the metopic suture was signaled in seven subjects (three males and four females) aged between 18 and 50 years.

Hypodontia. This anomaly refers to the absence of a few teeth from the primary or secondary dentition, due to a failure in the teeth buds development. Hypodontia in the permanent dentition, excluding the third set of molars, is found in 3-10% of the population, and it is more frequently encountered in Asians and Native Americans. The most common missing teeth are the third molars, followed by the second premolars and the incisors. Their absence is either unilateral or bilateral (Byahatti 2010).

Studies conducted to understand the genetic and environmental factors, have investigated the relationship between the severity and the distribution of hypodontia to family members and any discernable effect on maternal health during pregnancy (Parkin *et al.* 2009). The prevalence of hypodontia has fluctuant rates, ranging between 2.6% and 11.3% (Parti Larmour *et al.* 2005).

Although the maxilla is generally more affected (Ortner 2003, 598), we have identified hypodontia only on mandible, in two cases. In the first case, this anomaly was found in a woman aged 23-25 years (M VI-B) and it consisted of a failure in the eruption of the mandibular second premolars (left and right) (Figure 2). The second case was a male of 60-65 years (M XII), whose mandible lacked the left central incisor (Figure 3).



Figure 2. M VI-B, ♀, 23-25 years: hypodontia (absence of the mandibular second premolars).

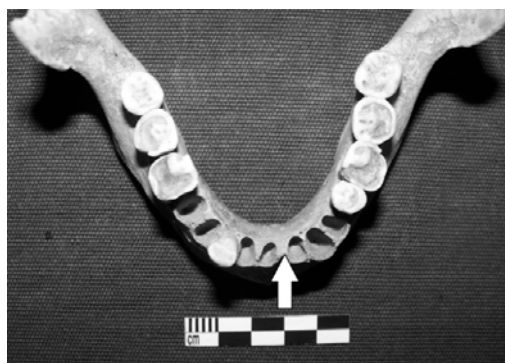


Figure 3. M XII, ♂, 60-65 years: hypodontia (absence of the left mandibular central incisor).

Atlanto-occipital fusion. The atlas assimilation to the occipital bone (the atlanto-occipital fusion) was recorded in a female teenager aged 17-18 years (M XVI), with an incidence of 1.09% (Figure 4). The atlas has the highest variability among the cervical vertebrae (Wysocki *et al.* 2003) and it can partially or totally fuse with the occipital bone (Nayak *et al.* 2005). The fusion of the atlas vertebra with the occipital bone might produce clinical problems such as cerebellar infarction and Bow Hunter's stroke (Sakai and Tsutsui 1999).



Figure 4. M XVI, ♀, 17-18 years: atlanto-occipital fusion.

Klippel-Feil syndrome; vertebral block. The spine segmentation defect leads to the appearance of block vertebrae. The subjects with a sensitive genetic background can develop severe forms of multiple hemimetamere defects which lead to severe deformity of the vertebral column (Barnes 1994). The Klippel-Feil syndrome represents the fusion between two or more cervical vertebrae and it is an axial segmentation defect which appears during weeks 3-8 of gestation. Individuals

with Klippel-Feil syndrome and cervical stenosis may be at increased risk for spinal cord injury after minor trauma determined by the hypermobility of the various cervical segments (Ilie 2008).

Klippel-Feil syndrome and thoracic vertebral block represent sporadic occurrences in the analyzed series (0.92% each). We found a single case of Klippel-Feil syndrome in a teenager female of 17-18 years (M XVI), showing the fusion of the axis with the third cervical vertebra (Figure 5). A single case of thoracic vertebral block was also recorded, in a mature male aged 30-35 (G9 M26) showing the fusion of the T4 and T5 (Figure 6).



Figure 5. M XVI, ♀, 17-18 years: Klippel-Feil syndrome.



Figure 6. G9 M26, ♂, 30-35 years: thoracic vertebral block (T4+T5).

Spondylolysis can be defined as a pars-interarticularis vertebral failure of ossification, leading to the separation of the vertebra in two parts: a ventral part made of the vertebral body and a dorsal part represented by the spinous process and the inferior articular process (Aufderheide and Rodriguez-Martin 1998). Spondylolysis was identified more frequently in males (Barnes 1994), and it was described as a congenital malformation due to defects in the ossification and development of the lamella (Shahriaree *et al.* 1979). In other reports spondylolysis was presented as a result of the mechanical stress in the lumbosacral region (Merbs 2002).

We identified two cases of bilateral spondylolysis in lumbar vertebrae: a female of 40-45 years (G14 M48) and a male aged 19-20 years (G15 M53-D) (Figures 7-8).



Figure 7. G14 M48, ♀, 40-45 years: lumbar vertebra (L5) with bilateral spondylolysis.

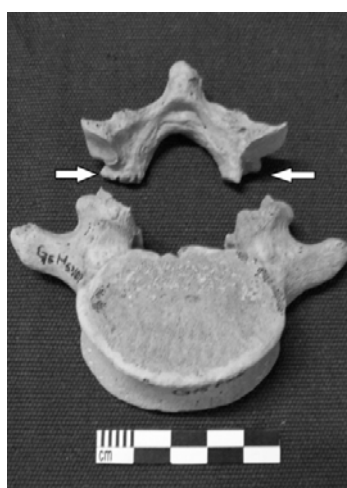


Figure 8. G15 M53-D, ♂, 19-20 years: lumbar vertebra (L4) with bilateral spondylolysis.

Sacralization and lumbarization. In the postcranial skeletons of the analyzed series, abnormalities appear frequently in the lumbosacral region of the spine (Table 1), and the most prevalent abnormalities were sacralization (13.18%) and lumbarization (15.38%).

A transitional lumbosacral vertebra is a common congenital anomaly first observed by Bertolotti (Kanchan 2009). When the fifth lumbar vertebra is completely fused to the sacrum (sacralization of L5), there are only four lumbar vertebrae, whereas when the first sacral vertebra is separated from the sacrum (lumbarization of S1), there are six lumbar vertebrae. In both cases, the defect can be complete or incomplete, bilateral or unilateral, symmetrical or asymmetrical (Aufderheide and Rodriguez-Martin 1998; Barnes 1994). The clinical significance of the lumbosacral transitional vertebra has been the subject of many debates, the number of cases ranging from 4% to 24% (Delpont *et al.* 2006).

In the studied skeletons, we identified 12 cases of sacralization (10 male and two female) aged between 18 and 50 years, whereas lumbarization was stated in 14 subjects (seven males and seven females) aged between 18 and 50 years.

Spina bifida occulta. *Spina bifida occulta* is an occult spinal dysraphism resulting from aplasia or hypoplasia of one or both parts of the neural arch or spinous processes. Thus, *spina bifida* is the most common inborn defect (Marcsik *et al.* 2002); it can affect any segment of the spine between the atlas and the sacrum; however, it is most frequently encountered in the lumbosacral area (L5-S1), with reported incidences up to 25% (Barnes 1994). Generally, the incidence of this defect decreases with age, particularly in the female cases. However, the exact cause of this difference between sexes remains unknown (Aufderheide and Rodriguez-Martin 1998).

Sacral *spina bifida occulta* was found in six subjects. A single sacrum with *spina bifida occulta* (in the segment S3-S4) belonged to a female aged 18-20 years, whereas the five sacra belonged to male subjects aged 18-60 years. In three cases, this malformation affected the following sacral segments: S1 and S3-S5; S3-S5; S2-S5. When all the posterior laminae of the sacral vertebrae are completely unfused, we are dealing with total sacral *spina bifida occulta* (total occult spinal dysraphism) (Senoglu *et al.* 2008). We identified total sacral *spina bifida occulta* (in the segment S1-S5 and L5-S5, respectively) in two males aged 40-60 years (Figures 9-10).

The incidence of sacral *spina bifida occulta* is higher (6.59% of the total number of sacra: 7.57% of the male sacra and 4% of the female sacra) compared to the values obtained for another population of the medieval Iași (1.55% of the total number of sacra and 3.22% of the male sacra) (Simalcsik *et al.* 2011).

Spina bifida atlantis posterior. The abnormalities affecting the atlas bone are quite rare and include several maladies, such as aplasia, hypoplasia and various fractures of the arch (Bonneville *et al.* 2004). The atlas is the only vertebra which develops from only two lateral ossification centers, one for each lateral mass (Pasku *et al.* 2007). Congenital absence or hypoplasia of the posterior arch of the atlas (*spina bifida atlantis posterior*) can be associated with several disorders, such

as the Arnold-Chiari malformation, gonadal dysgenesis and the Klippel-Feil, Down and Turner syndromes (Torriani and Lourenco 2002). It has been reported that hypoplasia of the posterior arch of the atlas may increase the risk of atlanto-axial subluxation in about 26% of the children aged 2-3 years (Martich *et al.* 1992).

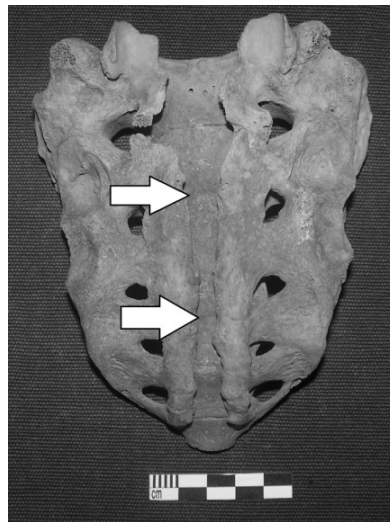


Figure 9. G10 M33-A, ♂, 40-45 years: total sacral *spina bifida occulta* (L5-S5).

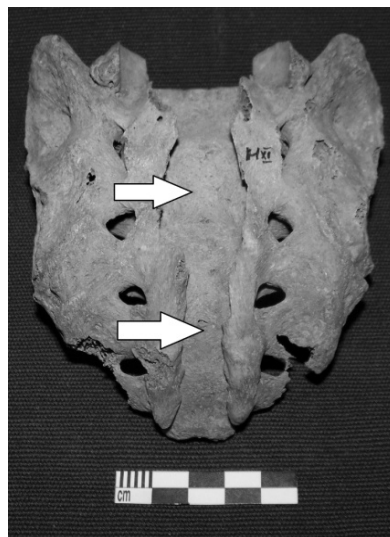


Figure 10. M XI, ♂, 55-60 years: total sacral *spina bifida occulta* (S1-S5).

In this skeletal series, *spina bifida atlantis posterior* was identified in two male adult subjects (30-35 years and 40-45 years, respectively) (Figures 11 and 12).



Figure 11. G3 M7, ♂, 30-35 years: *spina bifida atlantis posterior*.



Figure 12. G4 M14, ♂, 40-45 years: *spina bifida atlantis posterior*.

CONCLUSIONS

The prevalence of the skeletal abnormalities identified in the skeletons exhumed from the necropolis of the former Princely Court of Iași City (Iași County, Romania) fits in the general limits of variation published in other studies for historical populations and cited throughout the work. Different abnormalities (i.g. wormian bones, metopic suture, vertebral block) have been reported also in other medieval populations in Romania (e.g. Izvorul, Coconi, Cernica), but without specifying their frequency (Necrasov *et al.* 1967; Botezatu and Ștefănescu 1969; Botezatu and Ștefănescu 1970).

Most of the bone abnormalities identified in the analyzed series affected the spine. The highest incidence was recorded by lumbarization, sacralization and *spina bifida occulta*. Only few specimens presented other bone abnormalities: the atlas assimilation to the occipital bone, lumbar vertebrae with bilateral spondylosis, *spina bifida atlantis posterior*, vertebral block and Klippel-Feil syndrome.

Other abnormalities were identified in the cranial skeletons. A higher prevalence is recorded by wormian bones, whereas metopic suture and hypodontia represent sporadic occurrences.

Female subjects appear considerably less pathologically loaded compared to the male subjects. However, this assertion is restricted by the smaller number of female skeletons exhumed from the site. From this point of view, the necropolis seems to have a special character: the large number of male individuals and the absence of children (0-14 years). This fact could be correlated with the high frequency of some abnormalities (e.g. lumbarization and sacralization), suspecting familial relationships to be involved.

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ASPECTS CONCERNANT L'ÉTUDE MIXTE-LONGITUDINALE DE LA CROISSANCE DES ENFANTS ET ADOLESCENTS DE BUCAREST ET DU COULOIR BRAN-RUCĂR

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Our paper represents a modest homage for the MD Th. Enăchescu, Doctor of Medicine and anthropologist, who, through his rich and complex activity, had a dominant role in the continuity and development of the Romanian anthropology after the WW2. The partial results from the (unpublished) longitudinal study regarding the body growth of the children with ages ranged from 3-18 years from two different living environments, an urban area (Bucharest) and a highland rural area (Rucăr-Bran corridor), are presented. The research was conducted between 1977 to 1985, like, many other Romanian studies, in accordance with the international auxological research. The evolution of the two most important markers, height and weight, is presented in a percentile system through a graphic modeling of the growth progression throughout the encompassed ontogenetic stages, delineating through the distance curves the percentile channels – delayed, medium and advanced growth types. The most spectacular graphic representations are those of the successive growth rates. Through annual survey, at the same date, of the same subjects, it is a longitudinal study. By losing of some subjects and adding of others throughout the project's time, it is a mixed-longitudinal study. The final samples contain an impressive number of subjects (49,574 – a real cohort!): 19,753 boys and 19,762 girls from Bucharest, respectively 4,963 boys and 5,096 girls from the highland villages (an altitude of 700 – 1,300 meters) of the Rucăr-Bran corridor. The study shows the growth differences related to the life environment, age and gender, but its originality and importance is revealed through the methodological and applied aspect regarding the appreciation of the normality of growth and development as a mass or/and individual phenomenon.

Key-words: growth, longitudinal study, growth rate, percentiles, growth types.

INTRODUCTION

Notre travail représente un hommage au dr. Th. Enăchescu (1919-2014), un véritable médecin anthropologue, étudiant du professeur Fr. Rainer et une

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personnalité importante de l'Anthropologie roumaine qui, pendant cinq décennies après la deuxième guerre, a eu un rôle dominant pour la continuité et le développement de l'anthropologie selon sa signification de science intégrative de la recherche de l'homme. Parmi la multitude de recherches d'anthropologie auxologique, ergonomique, typologique, taxinomique, génétique, médico-légale etc.², nous avons choisi de présenter ici une partie des résultats de l'étude longitudinale de la croissance et développement des enfants et adolescents (3-18 ans), initiée et conduite par dr. Th. Enăchescu entre 1977-1985. A la fin de l'année 1985 dr. Enăchescu a été brutalement mis en retrait et, par conséquence, l'étude s'est finie. Les résultats n'ont été publiés, excepté un petit travail sur la trophicité (l'indice Rohrer), basé seulement sur une sélection des données (Luca et al., 1988). (6-7, 19).

Participants ou collaborateurs³, nous essayons par ce travail, en utilisant de meilleures moyennes techniques, de mettre en évidence l'effort grand, exceptionnel du docteur Th. Enăchescu pour l'organisation et le développement de la recherche, sa consonance avec les autres recherches européennes de même sorte d'une réelle importance clinique et méthodologique (Israelsohn, 1960; Tanner, 1960, 1962, 1977; Falkner, 1954, 1961; Meredith, 1955, 1968; Graffar, 1958; Grimm, 1966; Tanner, Whitehouse et Takaishi, 1966; Eveleth et Tanner, 1976; Prokopeč, 1962, Rajkai, 1970; Sinclair, 1969 etc.) (2, 8, 14, 16-17, 20-22, 24, 29, 35-36).

Il faut mentionner que dans l'anthropologie roumaine existent des études longitudinales importantes concernant la croissance (Cristescu, 1975, 1981; Glavce, 1979; Guja, 1983; Știrbu, 2004, Simalsik, 2007; Baci, Ciuhuța, 2012 etc.) mais, comparativement, celles-ci n'ont pas eu l'envergure et la compréhension de l'étude de dr. Th. Enăchescu. (1, 3-5, 9, 12-13, 15, 23, 32). L'étude mise en évidence sa importance méthodologique et applicative dans la clinique pédiatrique concernant l'appréciation du niveau de croissance et développement comme un phénomène collectif (de masse) et/ou individuel.

Le travail a comme objectif principal la présentation comparative de l'évolution de la stature et du poids des enfants d'âge préscolaire et scolaire de deux zones éco-géographiques différentes: Bucarest, la ville-capitale de Roumanie et, respectivement, les villages de la zone d'altitude (700-1300m) Bran-Dâmbovicioara (Couloir Bran-Rucăr, départements Brașov et Argeș).

L'évolution des deux marqueurs importants de la croissance, le poids et la stature, est suivie aussi par les vitesses de croissance et le dimorphisme sexuel pendant les étapes ontogéniques surprises entre 3-18 ans.

En même temps, les résultats décrivent des modèles de croissance de la stature et du poids différenciés selon la population, l'âge, le sexe, le milieu de vie

² C'est aussi l'*Annuaire Roumain d'Anthropologie* qui a publié dès sa apparition (1964) beaucoup de travaux scientifiques de dr. Th. Enăchescu, fréquemment avec une autre personnalité de l'anthropologie roumaine, dr. Suzana Grințescu-Pop (1908-1977).

³ Au recuilement des données ont participé constamment ou pour un temps limité : Aurelia Popescu(†), Viorica Seghedi(†), Viorica Nicolau, Gabriela Călin, Margareta et C. Picioiu, Delia Comsia, E. Berdeli.

etc. à l'aide des percentiles, en réalisant des canaux de développement – moyen, en retard, en avance – qui peuvent être considérés des types de croissance (12-13, 26-28, 31).

MATÉRIEL ET MÉTHODES

Les données du travail sont les mesurages de la stature et du poids recueillies entre 1977-1985 sur les enfants d'âge préscolaire et scolaire de Bucarest et de villages du Couloir Bran-Rucăr (départements Braşov et Argeş), chaque année, approximativement à la même date. Finalement, le volume des échantillons selon l'âge, le sexe et la zone totalise 19753 garçons et 19762 filles de Bucarest, entre 3-18 ans, respectivement, 4963 garçons et 5095 filles de Bran-Rucăr entre 4-16 ans (ici étant, statistiquement, un nombre insuffisant de sujets de 3, 17 et 18 ans).(Tableau 1).

Tableau 1

Le volume final de la recherche

Âge	Bucarest		Bran-Dâmbovicioara	
	Garçons	Filles	Garçons	Filles
3	143	156	14	21
4	387	398	62	60
5	762	721	173	162
6	1011	984	261	278
7	1507	1467	343	343
8	2085	2078	403	181
9	2746	2765	462	491
10	2656	2655	640	658
11	2156	2155	802	847
12	1831	1919	688	725
13	1627	1706	544	618
14	1311	1331	333	381
15	680	591	157	196
16	448	381	60	84
17	247	286	12	40
18	156	169	9	10
Total	19753	19762	4963	5095

Les méthodes appliquées ont été: la méthode longitudinale (prélèvement annuel sur les mêmes sujets), la méthode mixte-longitudinale (la perte et l'inclusion des sujets au cours de la recherche) et la méthode transversale (la compréhension dans les classes d'âge des groupes différents de sujets mesurés pendant des années calendaires différentes). (Glavce 1979). Les données suivies

annuellement ont été inscrites dans une fiche spéciale recommandée par OMS dans le Programme Biologique International (Necrasov et Cristescu 1973: 131) – la fiche de poursuite longitudinale de la croissance de l'enfant. Celle-ci comprend une série de références d'identification du chaque enfant sur l'état civil, social, médical etc. (Falkner 1961) et dans les colonnes destinées aux mesurages figurent: le périmètre céphalique, thoracique, le poids, la stature, la stature-assise, les plis tricipital et sous-scapulaire. C'est, parmi d'autres, une illustration des dimensions qui par leur interrelation auraient pu donner une image approximative d'un morphotype moyen ou individuel. (Figure 1). (8, 12-13, 23).

The image shows two examples of longitudinal growth tracking forms. The left form is titled "FISA DE URMĂRIRE LONGITUDINALĂ A CREȘTERII ȘI DEZVOLTĂRII COPILULUI" and contains handwritten data for a child named "Mădălena". The right form is a similar grid with handwritten data for a child named "Mădălena".

Figure 1. Fiche de la poursuite longitudinale de la croissance d'un enfant (exemple).

Les circonstances dans lesquelles la recherche a été arrêtée– le départ du dr. Th. Enăchescu et son remplacement par un autre coordonnateur – ont limité dramatiquement les résultats finaux seulement au niveau de la stature et du poids. Pour l'élaboration du travail final on a utilisé entre 1980-1986 le service d'un institut spécial de calcul automatique où les données ont été transférées par des cartes perforées et traitées à l'aide d'un ordinateur IBM. Les données ont été intégrées dans un système longitudinal par la méthode de M.A. van't Hof et Ch. J. Kowalski. On a calculé les valeurs moyennes de la stature et du poids (Tableaux 2 et 3). La variation phénotypique staturale et pondérale a été statistiquement compartimentée en percentiles (2,5 – 10 – 25 – 50 – 75 – 90 et 97,5) en réalisant une modélisation par des courbes de distance concernant la progression de la croissance (Fig. 2-9).

On a appliqué des tests de signification pour mettre en évidence les différences entre les lots selon l'âge, le sexe et le milieu de vie (Tableau 4, Fig. 10-11). L'aspect qualitatif du procès de croissance a été apprécié par le calcul des vitesses de croissance annuelle (Figure 12-19). Pendant le déroulement de la recherche ont été surprises chez les sujets (en partant dès lois des grandes alternances du Godin) les périodes ontogéniques suivantes: après Pende – la petite puberté ou „proceritas prima”(4-8 ans), „turgor secundus” (8-11 ans), prépuberté ou „proceritas secunda”, puberté proprement dite ou „turgor tertius” et postpuberté ou „internubilo”; après Stratz – le premier allongement du corps (5-7 ans), le deuxième accomplissement du corps (8-10 ans), le deuxième allongement du corps (11-15ans); après Grimm – la première (6/7 – 11/12 ans) et la deuxième transformation corporelle (8, 14, 16, 20, 25-26, 31).

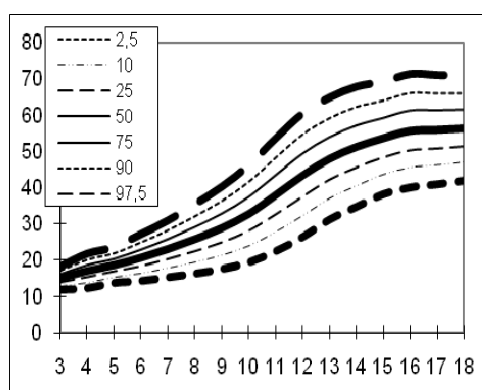


Figure 2. Percentiles du poids.
Garçons de Bucarest

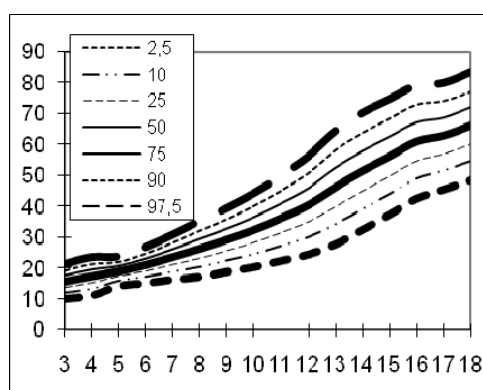


Figure 3. Percentiles du poids.
Filles de Bucarest

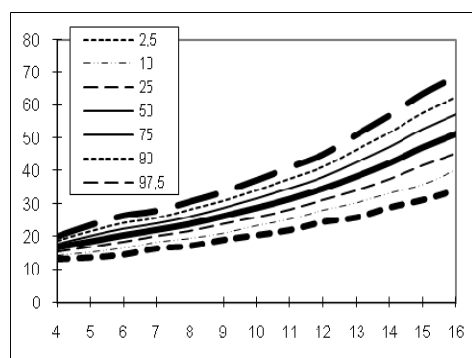


Figure 4. Percentiles du poids.
Garçons de Bran-Dâmbovicioara

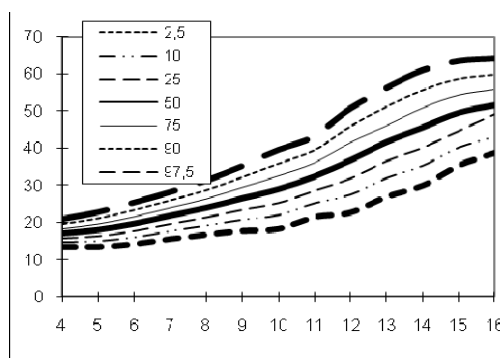


Figure 5. Percentiles du poids.
Filles de Bran- Dâmbovicioara

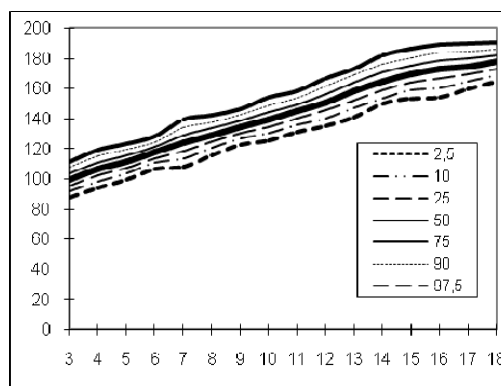


Figure 6. Percentiles de la stature.
Garçons de Bucarest.

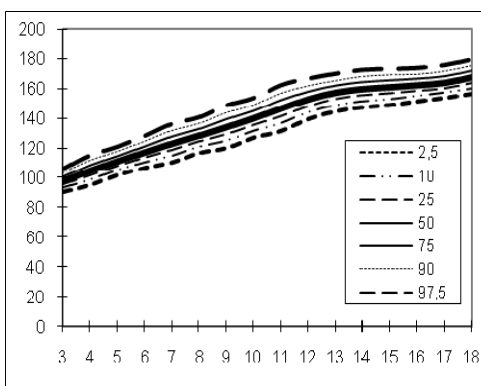


Figure 7. Percentiles de la stature. Filles de
Bucarest.

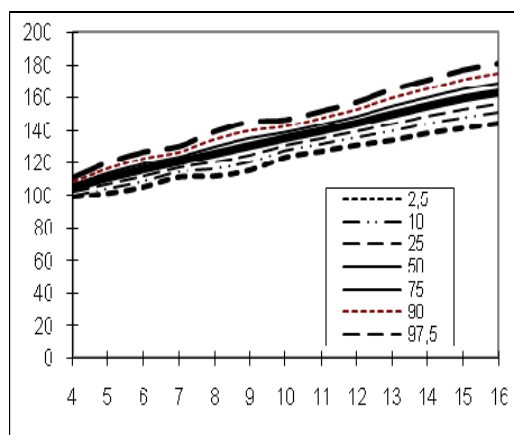


Figure 8. Percentiles de la stature.
Garçons de Bran-Dâmbovicioara.

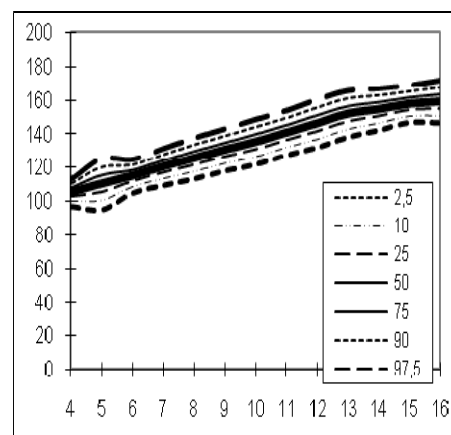


Figure 9. Percentiles de la stature.
Filles de Bran-Dâmbovicioara

RÉSULTATS ET CONCLUSIONS

C'est pour la première fois lorsqu'on réalise en Roumanie une étude de telle envergure. Les résultats ne sont pas très spectaculaires: les enfants bucarestois de deux sexes dépassent les enfants du Couloir par toutes les classes d'âge. Les différences statistiquement significatives s'enregistrent pour le poids chez les deux sexes entre 14-17 ans, tandis que pour la stature chez les garçons entre 14-18 ans et chez les filles entre 14-17 ans.

En ce qui concerne le croisement des courbes de croissance des deux sexes, soi-disant „le dimorphisme sexuel inversé ou passager” (Necrasov et Cristescu 1973 : 141), les filles de Bucarest dépassent en hauteur les garçons à 10 ans et sont dépassées par ceux-ci à 13 ans, tandis que les filles de la zone rurale d'altitude dépassent les garçons à 9 ans et sont dépassées à 14 ans. En ce qui concerne le poids, les filles bucarestoises dépassent les garçons à 10 ans et sont dépassées à 14 ans tandis que les filles de Couloir, à peu près égales aux garçons entre 9-10 ans, les dépassent à 11 ans et sont dépassées par ceux-ci à peine après 16 ans (Tableaux 2-4).

Tableau 2

Evolution de la stature moyenne au cours de la croissance

	Bucarest				Bran-Dâmbovicioara			
	Garçons		Filles		Garçons		Filles	
Age	M	DS	M	DS	M	DS	M	DS
3	99,48	6,14	97,91	3,96				
4	106,59	6,57	104,89	5,09	104,83	3	105,13	4,08
5	111,24	6,11	111,14	4,87	110,73	4,79	110,26	7,68
6	117,39	5,53	117,18	5,5	115,93	5,46	114,97	5,11
7	123,69	7,96	123,09	6,59	120,7	4,78	120,5	5,6
8	128,89	6,65	128,44	6,11	125,48	5,14	125,5	6,21
9	134,41	6,12	134,1	7,33	130,25	7,57	130,54	6,34
10	139,32	7,11	140,06	6,83	134,96	5,85	135,45	6,81
11	144,56	7,01	146,64	7,92	139,44	6,26	140,63	6,69
12	150,77	5,14	152,86	7	144,12	6,71	146,13	7,2
13	158,02	8,72	157,37	6,37	149,51	7,98	151,84	7
14	164,75	5,54	159,79	9	154,55	8,35	154,48	6,31
15	169,47	8,08	161,03	6,13	159,17	9,13	157,76	5,64
16	172,8	10,49	162,35	5,74	162,69	9,38	159,05	6,45
17	174,36	7,63	163,71	5,83				
18	177,44	6,73	163,98	5,55				

Tableau 3

Evolution du poids moyen au cours de la croissance

	Bucarest				Bran-Dâmbovicioara			
	Garçons		Filles		Garçons		Filles	
Age	M	DS	M	DS	M	DS	M	DS
3	15,61	2,89	14,98	1,67				
4	17,31	3,23	17	2,47	16,62	5,61	17,06	6,06
5	18,98	2,48	18,64	2,56	18,61	7,88	18,01	7,6
6	20,99	3,02	20,69	3,33	20,49	9,47	19,67	9,08
7	23,62	3,75	23,08	4,03	22,17	9,14	21,82	3,23
8	26,29	1,48	25,81	1,55	23,99	3,1	23,93	3,71
9	29,2	1,68	28,87	1,84	26,33	3,68	26,47	4,45
10	32,39	1,94	32,77	2,16	28,83	4,24	28,91	5,4
11	36,18	2,22	37,99	2,51	31,56	4,85	32,33	5,57
12	40,38	2,57	43,42	2,75	34,73	5,2	36,7	7,15
13	46,2	2,97	48,04	2,71	38,44	6,38	42,53	7,29
14	51,46	3,05	51,32	2,67	42,53	7,29	45,46	7,94
15	56,18	3,02	53,76	2,5	47,29	8,21	49,43	7,19
16	61,01	2,95	55,77	2,52	51,37	8,77	51,48	6,49
17	62,84	2,78	56,05	2,42				
18	66,18	2,82	56,44	2,33				

Le dimorphisme sexuel concernant les différences entre les valeurs moyennes staturales ou/et pondérales des garçons par rapport aux filles de deux populations se manifeste au cours de la croissance plus intensément chez les enfants bucarestois, où les valeurs du test de signification sont très grandes spécialement pendant la période marquée par les deux croisements des courbes et pendant la période suivante quand les garçons reviennent vers leur place, en avance (Figure 10-11).

Tableau 4

Les différences de croissance staturo-pondérale selon le lot et le sexe (test t)

Age	Stature				Poids			
	Différences sexuelles		Différences entre les lots		Différences sexuelles		Différences entre les lots	
	urbain	rural	Garçons	Filles	urbain	rural	Garçons	Filles
3	2,62				2,25			
4	4,15	-0,46	3,52	-0,43	1,55	-0,41	0,94	-0,07
5	0,36	0,67	1,21	1,42	3,78	-0,04	0,61	1,03
6	0,88	2,13	3,94	6,31	3	1,04	0,86	1,85
7	2,46	0,5	9,06	7,28	5,4	0,67	2,96	6,3
8	2,25	-0,04	12,18	6,12	12	0,2	16,43	6,96
9	1,82	-0,64	11,55	11,12	8,25	-0,54	15,94	12
10	-3,7	-0,54	16,77	16,37	-7,6	-0,31	19,78	19,3
11	-9,45	-3,72	19,69	21,46	-30,17	-2,96	25,67	28,3
12	-12,29	-5,58	25,58	22,43	-38	-5,97	26,9	24,89
13	2,5	-5,18	20,76	17,28	-20,49	-7,85	28,74	20,84
14	16,53	0,13	21,25	12,95	1,27	-5,14	21,78	13,95
15	21,1	1,7	13,03	6,96	17,29	-2,61	13,68	8,33
16	18,33	2,6	7,72	4,4	26,2	-0,08	8,46	5,96
17	18,05				30,86			
18	20,09				14,12			

Les étapes ontogéniques sont aussi surprises sur les courbes de vitesses de croissance, très spectaculaires graphiquement. (Figure 11-19). Les différences d'augmentations successives annuelles sont favorables aux enfants de milieu urbain. Pour la stature, le gain annuel maximal chez les garçons s'enregistre entre 12-13 ans, les bucarestois en réalisant une augmentation plus grande (7,25:5,39cm). Chez les filles bucarestaises, le gain maximal se produit entre 10-11 ans (6,58cm), tandis que les filles du Couloir consignent le rendement maximal entre 12-13 ans (5,71). En ce qui concerne le poids, les garçons de Bucarest enregistrent le maximum d'augmentation entre 12-13 ans (5,82kg) et ceux de

Couloir entre 14-15 ans (4,76kg). Pour les filles, le gain pondéral maximal est marqué entre 11-12 ans (5,43kg) et pour les filles rurales entre 12-13 ans (4,88kg). On observe que les intervalles qui marquent le rythme maximal coïncident à ceux d'âge prépubéral dont on enregistre la poussée (le pic) de croissance pour les filles, avant l'apparition des premières règles, l'âge moyen de la menarche étant calculé à 12,6 ans pour les bucarestoises et à 14,5 ans pour les filles de Couloir (Luca et al. 1988). (19).

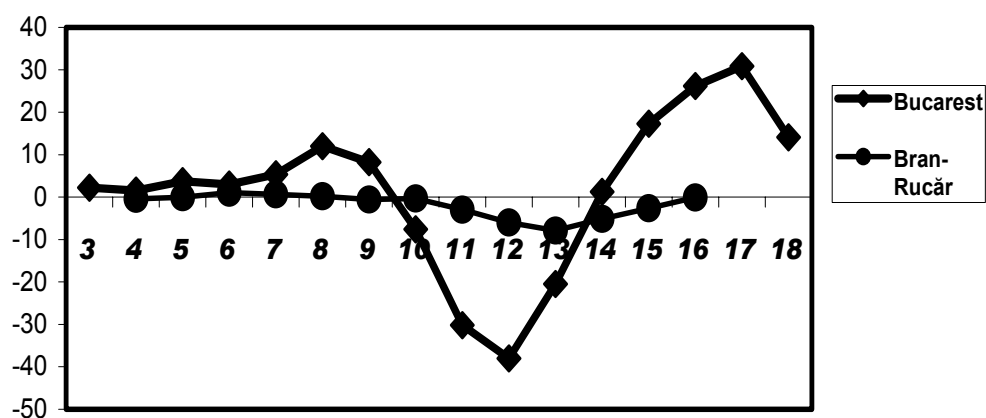


Figure 10. Le dimorphisme sexuel pondéral au cours de la croissance (t).

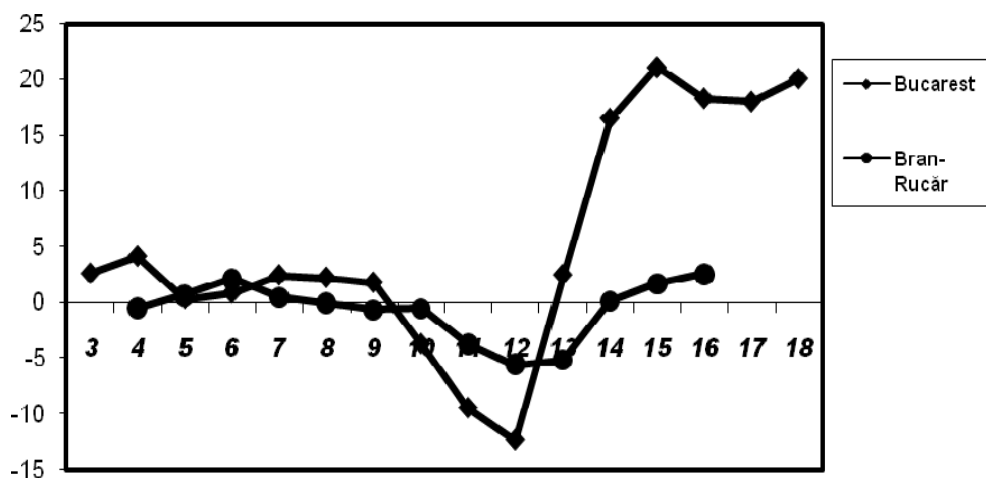


Figure 11. Le dimorphisme sexuel statural au cours de la croissance (t).

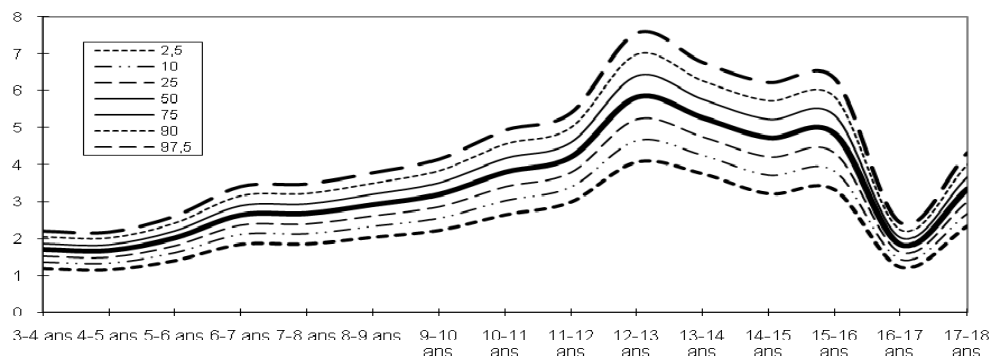


Figure 12. Percentiles de la vitesse de croissance pondérale. Garçons de Bucarest.

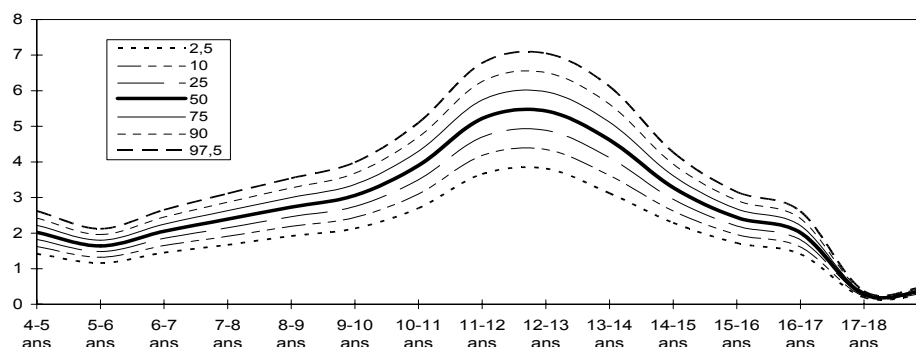


Figure 13. Percentiles de la vitesse de croissance pondérale. Filles de Bucarest.

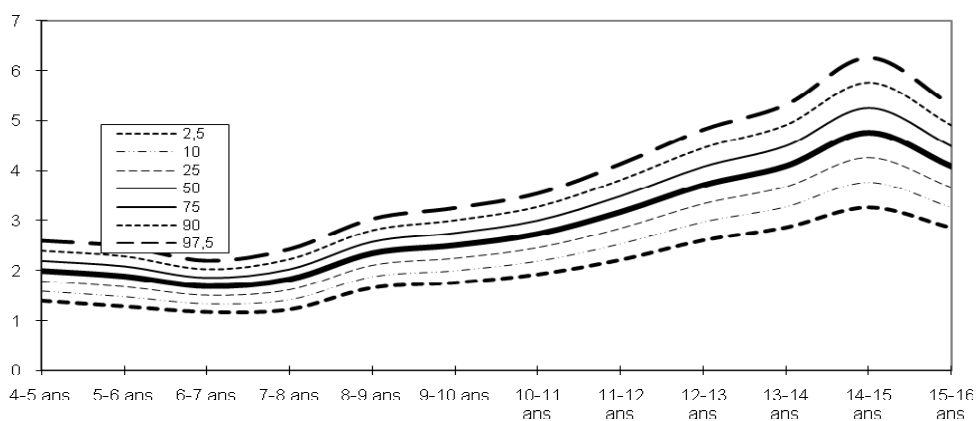


Figure 14. Percentiles de la vitesse de croissance pondérale. Garçons de Bran-Dâmbovicioara.

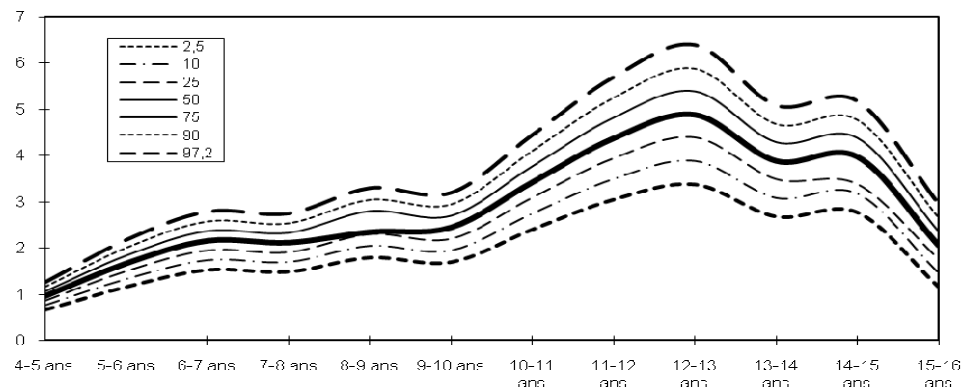


Figure 15. Percentiles de la vitesse de croissance pondérale. Filles de Bran-Dâmbovicioara.

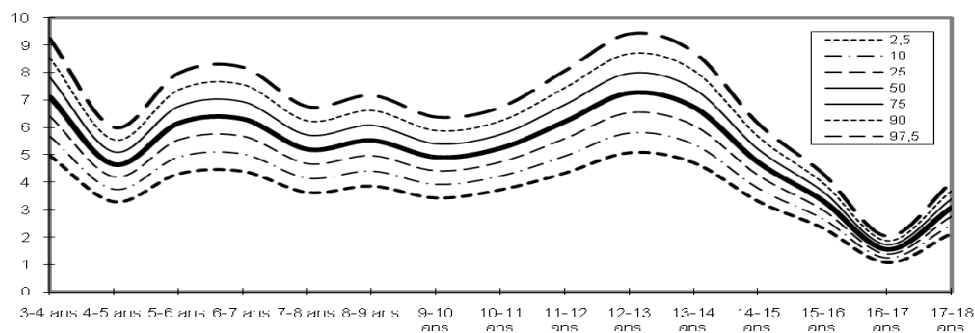


Figure 16. Percentiles de la vitesse de croissance staturale. Garçons de Bucarest.

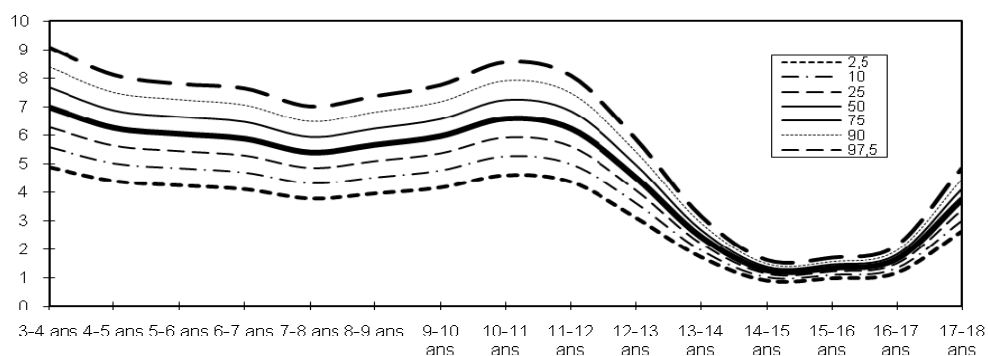


Figure 17. Percentiles de la vitesse de croissance staturale. Filles de Bucarest.

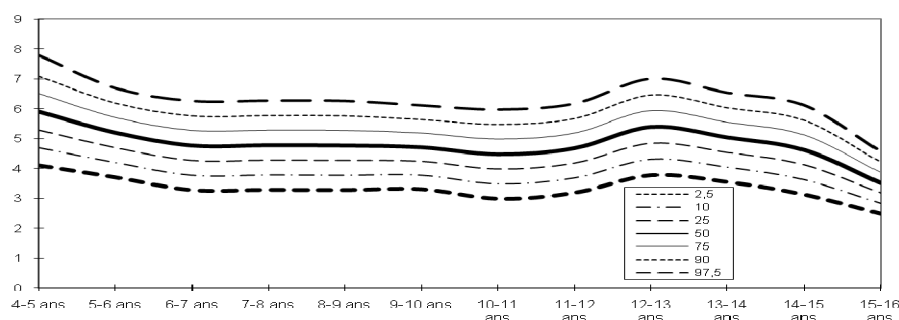


Figure 18. Percentiles de la vitesse de croissance staturale. Garçons de Bran-Dâmbovicioara.

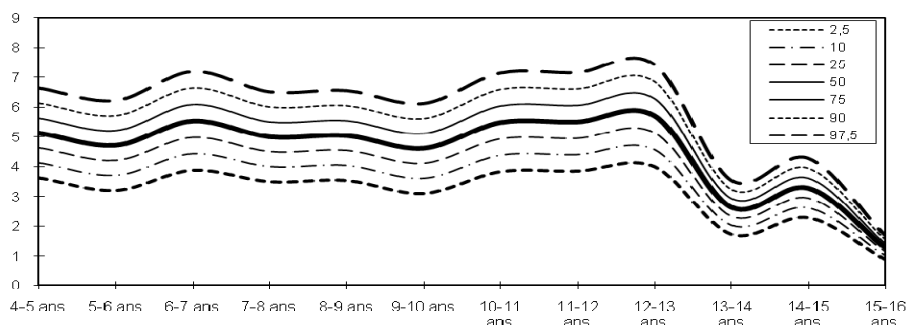


Figure 19. Percentiles de la vitesse de croissance staturale. Filles de Bran-Dâmbovicioara.

Une élaboration des standards de croissance staturo-pondérale en système percentilaire permet l'évaluation d'une position occupée par un enfant dans une collectivité, une appréciation différenciée (individualisée) de la croissance et la découverte plus facile des variantes avec un potentiel morbide situées dans la „zone d'alarme”, à l'extérieur de l'intervalle délimité par les percentiles 3-97, dans notre travail 2,5 – 97,5. (13, 27).

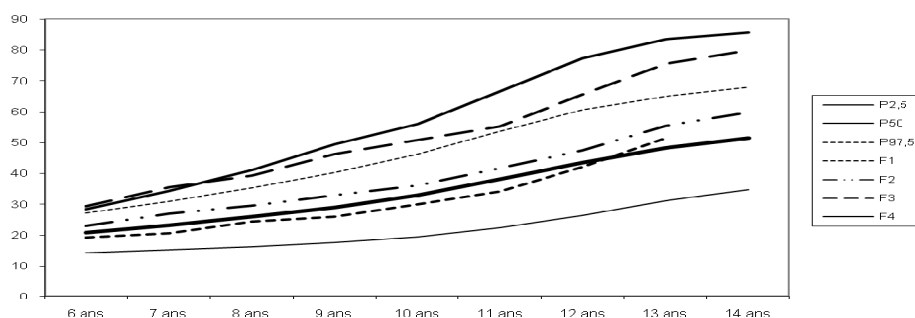


Figure 20. Exemples de positions par le poids de quelques filles bucarestoises au cours de croissance dans les canaux percentilaires.

On peut suivre les enfants trouvés sous un traitement médical et/ ou l'efficacité du traitement etc. Par exemple, nous avons choisi quelques cas concernant le poids des filles au cours de 8-9 ans et la représentation graphique met en évidence pour deux filles une évolution entre les limites normales (F1 et F2), mais pour les autres (F3 et F4), une évolution en dehors des limites de normalité, au-dessus du percentile 97,5, une position qui démontre clairement surpondéralité (Figure 20).

Sans épuiser tous les résultats de la recherche auxologique longitudinale, on voit que les études de la croissance restent en actualité et, en dépit de l'écoulement du temps, nous sommes reconnaissants au notre premier professeur d'anthropologie, le docteur Th. Enăchescu.

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RÉPARTITION DU FACTEUR RH DANS LA POPULATION ROUMAINE

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This review summarizes all available data on the Rh factor of the Romanian population including results from our studies as well as published work by other authors. We provide an extended view within this analysis, with genic and genotype frequencies, completing the results of some authors that consist only in the values corresponding to the Rh⁺ and Rh⁻ phenotypes. The sample comprises 92321 subjects, and is analyzed according to the geographical distribution – both historical provinces as well as counties within these regions. Finally, the Romanian sample is compared to other populations within a global framework, drawing conclusions regarding its European affinity and its place at continental level.

Key-words: Rh factor, Romanian population, Romanian's historical provinces and counties.

En 1940 K. Landsteiner et A.S. Wiener ont signalé que le sérum des lapins injectés avec des érythrocytes du singe *Macacus rhesus* agglutine les érythrocytes de 85% d'hommes. On a découvert d'abord un antigène commun aux singes et aux hommes – l'antigène D -, puis on a découvert l'existence des autres antigènes (C, c, D, E, e). Après Race et Fischer (Fischer, Race 1946:157; Mourant 1954; Wiener 1940:223) ces antigènes seraient contrôlés par 6 gènes organisés en 3 paires d'allèles: Cc, Dd et Ee, en linkage, avec des locus sur le chromosome 1 (Isvoranu 1988:400-401; Neagoș et al. 2012:125-126, 133-134).

Le facteur Rh⁺ est déterminé par la présence de l'antigène D et Rh⁻ par son absence. Rh est transmis comme un caractère mendélien simple dominant. Au niveau de la population existent les suivants génotypes et phénotypes: homozygote (dominant) DD – des individus Rh⁺; hétérozygote Dd – des individus Rh⁺; homozygote (récessif) dd – des individus Rh⁻ (Olinescu 1995:29-31).

L'antigène D est le responsable principal pour les réactions hémolytiques après les transfusions et la cause de l'érythroblastose fœtale. Les antigènes C et E sont plus faibles et moins impliqués à la détermination de l'hémolyse (Neagoș et al. 2012:125-126, 133-134).

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Du point de vue anthropologique nous sommes intéressés par le mode de répartition du facteur Rh dans la population roumaine, par les différences d'une province à l'autre ou d'un département à l'autre, par la dimension des variations par rapport à la moyenne nationale, et la position par rapport à l'ensemble des populations européennes.

Des travaux antérieurs concernant la recherche du Rh se sont basés sur les données recueillies soit de centres de transfusions (Mihailescu 1958: 10), soit de grandes villes ou de zones ruraux (Necrasov 1970-1971: 5-26). Nous nous référons ici, spécialement, aux communautés ruraux, mais sans négliger les villes – résidences de département. Ainsi, nous avons considéré que l'échantillon résulté exprime mieux les différentes régions du pays, les habitants étant les autochtones du chaque département. Finalement, on totalise un nombre de 92321 individus des deux sexes, répartis en deux tableaux: l'un sur les provinces historiques et l'autre tant sur les provinces que sur les départements (Mihăilescu 1958: 10; Necrasov 1970-1971: 5-26; Vulpe 2012: 136-139).

Conformément à la répartition selon les provinces historiques, la plus basse fréquence de Rh+ se trouve en Dobroudja (85,35%), tandis que la plus élevée est en Banat (88,52%). Entre celles-ci se situent les trois grandes provinces: Transylvanie avec 86,57%, Munténie avec 86,71% et Moldavie avec 87,19%, la moyenne nationale étant de 86,78% (Tableau 1).

Tableau 1

Fréquence du facteur Rh en Roumanie

Province	Nº sujets	Rh	rh	R	r	RhRh	Rhrh	rh rh
Transylvanie	25189	21807 86,57	3382 13,43	0,6335	0,3665	40,13	46,44	13,43
Munténie	22099	19162 86,71	2937 13,29	0,6354	0,3646	40,37	46,34	13,29
Moldavie	28075	24479 87,19	3596 12,81	0,6421	0,3579	41,23	45,96	12,81
Olténie	4930	4227 85,74	703 14,26	0,6224	0,3776	38,74	47,00	14,26
Banat	5531	4896 88,52	635 11,48	0,6612	0,3388	43,72	44,80	11,48
Dobroudja	6497	5545 85,35	952 14,65	0,6173	0,3827	38,10	47,25	14,65
ROUMANIE	92321	80116 86,78	12205 13,22	0,6364	0,3636	40,50	46,28	13,22

Rh-, avec une fréquence qui varie entre 11 et 14%, présente des valeurs extrêmes situées inversement par rapport aux celles enregistrées de Rh+. Ainsi, la valeur minimale appartient à la zone de Banat (11,48%) et celle maximale à l'aire de Dobroudja (14,65%). Les valeurs intermédiaires se trouvent dans les trois grandes provinces: Transylvanie (13,43%), Munténie (13,29%), Moldavie (12,81%), la moyenne nationale étant de 13,22%. (Figure 1)

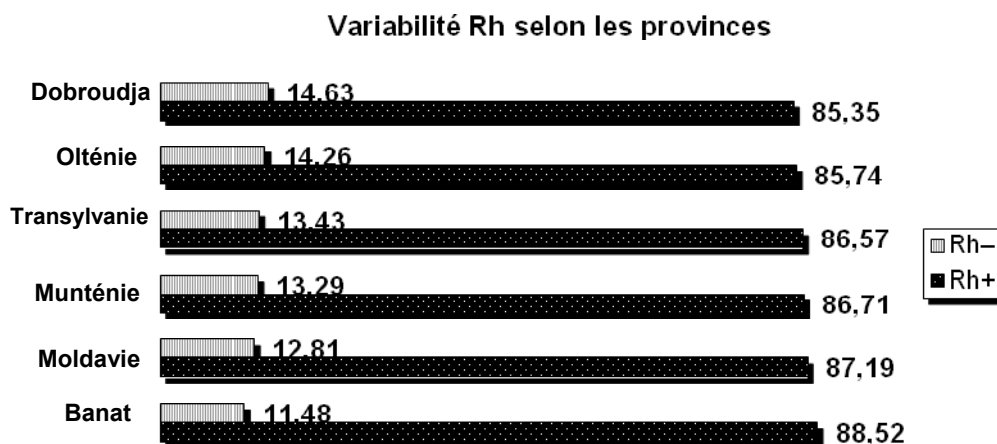


Figure 1. Variabilité du Rh selon les provinces historiques roumaines.

Les différences entre les valeurs enregistrées au niveau des provinces ont été prouvées par le test chi-carré (X^2). Nous avons trouvé beaucoup de différences statistiquement significatives: entre Banat et toutes les autres provinces; entre Moldavie et Transylvanie, Olténie et Dobroudja; entre Munténie et Dobroudja; entre Transylvanie et Dobroudja. Les plus fortes différences significatives se trouvent entre Banat-Dobroudja ($X^2=26,25$), Banat-Olténie ($X^2=18,04$), Moldavie-Dobroudja ($X^2=15,71$), mais aussi entre Banat-Transylvanie ($X^2=15,11$ m) et Banat-Munténie ($X^2=12,87$). (Tableau 2)

Dans notre synthèse nous avons utilisé tant les données personnelles aussi que celles publiées par d'autres auteurs. Dans certaines localités manquent les données concernant les fréquences géniques et génotypiques, seulement les valeurs des phénotypes (Rh+ et Rh-). C'est la raison qui nous a déterminé de calculer, selon le cas, les fréquences géniques après les formules: $r = \sqrt{Rh-}$; $R = 1 - \sqrt{Rh-}$ et les fréquences génotypiques après les formules: $RhRh = R^2$; $rh rh = r^2$; $Rhrh = R \times r \times 2$.

Conformément au tableau 1, la fréquence de gène R suit la même échelle valorique que celle de Rh+, tandis que le tracé de la fréquence de gène r suit, en sens contraire, les même échelons valoriques que ceux de Rh-. Les positions graduelles des provinces en ce qui concerne la fréquence génique et phénotypique illustrent la variation décrite au-dessous:

Rh+, R = Banat > Moldavie > Munténie > Transylvanie > Olténie > Dobroudja.

Rh-, r = Dobroudja > Olténie > Transylvanie > Munténie > Moldavie > Banat.

Tableau 2

Différences entre les provinces selon les fréquences phénotypiques du Rh (test khi-carré, X^2)

Test X^2	Moldova	Muntenia	Transilvania	Oltenia	Dobrogea
Banat	7,46*	12,87*	15,11*	18,04*	26,25*
Moldova		2,53	4,45*	7,79*	15,71*
Muntenia			0,19	3,25	7,93*
Transilvania				2,44	6,58*
Oltenia					0,35
Dobrogea					

* - différences statistiquement significatives

La valeur du gène R augmente de 0,6173 en Dobroudja à 0,6612 en Banat et la valeur du gène r baisse de 0,3827 en Dobroudja à 0,3388 en Banat.

La répartition de Rh selon les départements et les provinces historiques est représentée dans le tableau 2.

Dans 4 départements du totale de 40 départements de notre pays manquent les données concernant le facteur Rh (Sălaj, Maramureș, Harghita și Covasna).

Tableau 3

La répartition du facteur Rh (D) selon les provinces historiques et départements (%) *

Province	Département	Nº sujets	Rh	rh	R	r	RhRh	Rhrh	rhrh
Transilvanie	Arad	3540	91,25	8,75	0,7042	0,2958	49,59	41,66	8,75
	Hunedoara	3896	84,80	15,20	0,6101	0,3899	37,22	47,58	15,20
	Alba	985	84,37	15,63	0,6047	0,3953	36,57	47,80	15,63
	Sibiu	146	83,57	16,43	0,5947	0,4053	35,37	48,20	16,43
	Brașov	5768	87,41	12,59	0,6452	0,3548	41,63	45,78	12,59
	Mureș	2582	82,34	17,66	0,5798	0,4202	33,62	48,72	17,66
	Cluj	3568	87,33	12,67	0,6441	0,3559	41,48	45,85	12,67
	Bihor	2284	85,80	14,20	0,6232	0,3768	38,84	46,96	14,20
	Satu Mare	2000	86,16	13,84	0,6280	0,3720	39,44	46,72	13,84
	Bistrița Năsăud	420	84,04	15,95	0,6006	0,3994	36,07	47,98	15,95
Munténie	Argeș	3951	88,76	11,24	0,6647	0,3353	44,18	44,58	11,24
	Dâmbovița	2134	86,25	13,73	0,6295	0,3705	39,63	46,64	13,73
	Prahova	4302	86,80	13,20	0,6367	0,3633	40,54	46,26	13,20
	Buzău	1872	83,49	16,51	0,5937	0,4063	35,25	48,24	16,51
	Teleorman	2090	85,64	14,35	0,6212	0,3788	38,59	47,06	14,35
	Ilfov	3836	86,86	13,14	0,6375	0,3625	40,64	46,22	13,14
	Ialomița	1886	88,12	11,88	0,6553	0,3447	42,94	45,16	11,88
	Brăila	2028	85,45	14,55	0,6186	0,3814	38,27	47,18	14,55

(suite du Tableau 3)

Moldavie	Botoșani	2657	86,45	13,55	0,6319	0,3681	39,93	46,52	13,55
	Iași	2588	87,33	12,67	0,6441	0,3559	41,49	45,84	12,67
	Vaslui	1181	86,03	13,97	0,6262	0,3738	39,21	46,82	13,97
	Galați	4354	87,57	12,43	0,6474	0,3526	41,91	45,66	12,43
	Suceava	3794	86,95	13,05	0,6388	0,3612	40,81	46,14	13,05
	Neamț	3430	84,64	15,36	0,6081	0,3919	36,98	47,66	15,36
	Bacău	3620	88,07	11,93	0,6546	0,3454	42,85	45,22	11,93
	Vrancea	6451	88,40	11,60	0,6594	0,3406	43,48	44,92	11,60
Olténie	Dolj	688	87,35	12,65	0,6443	0,3557	41,51	45,84	12,65
	Gorj	1133	85,97	14,03	0,6254	0,3746	39,11	46,85	14,03
	Mehedinți	1622	83,72	16,28	0,5965	0,4035	35,58	48,14	16,28
	Olt	658	89,97	10,03	0,6833	0,3167	46,69	43,28	10,03
	Vâlcea	829	84,68	15,32	0,6086	0,3914	37,04	47,64	15,32
Banat	Carș Severin	3531	89,21	10,79	0,6715	0,3285	45,09	44,12	10,79
	Timiș	2000	87,30	12,70	0,6436	0,3564	41,42	45,88	12,70
Dobro udja	Constanța	3980	84,87	15,12	0,6112	0,3888	37,36	47,52	15,12
	Tulcea	2517	86,09	13,91	0,6270	0,3730	39,31	46,78	13,91
R O U M A N I E		92321	86,78	13,22	0,6364	0,3636	40,50	46,28	13,22

* Données après les Atlas anthropologiques conçus selon les provinces historique.

En évaluant les fréquences du tableau 3 on peut obtenir la suivante représentation schématique:

Tableau 4

Variabilité de Rh selon les départements

Variation	Phénotypes	
	Rh ⁺	Rh ⁻
min:	82,34% - dép. Mureș	8,75% - dép. Arad
max:	91,25% - dép. Arad	17,66% - dép. Mureș
moyenne:	86,78%	13,22%
	$\bar{R}$	$\bar{r}$
min:	0,5798 - dép. Mureș	0,2958 - dép. Arad
max:	0,7042 - dép. Arad	0,4202 - dép. Mureș
moyenne:	0,6364	0,3636

On voit que l'intervalle de variation entre fréquences minimales et celles maximales de Rh⁺ est plus grand au niveau des départements par rapport aux provinces (82,34% - 91,25%), respectivement 85,35% - 88,52%. (tableau 4)

Nous rendons au-dessous un tableau de la distribution de Rh selon le départements (fait exception le département Arad où se dépassent les limites des fréquences courantes) pour illustrer l'amplitude de variation pour chaque province soumise à l'investigation (tableau 5):

Tableau 5

La distribution de Rh selon le département

Province	Département – minim(%)	Département – maxim(%)	Différence (%)
Transylvanie	Mureș 82,34	Brașov 87,41	5,07
Munténie	Buzău 83,49	Argeș 88,76	5,27
Moldavie	Neamț 84,64	Vrancea 88,40	3,76
Olténie	Mehedinți 83,72	Olt 89,27	6,25
Banat	Timiș 87,30	Caraș Severin 89,21	1,91
Dobroudja	Constanța 84,87	Tulcea 86,09	1,21
Moyenne/pays:	86,78		

L'amplitude de l'intervalle de variation selon le département oscille d'une province à l'autre entre 1 et 6 pourcents et la plus grande valeur enregistrée c'est pour Olténie (6%, 25%).

Après la découverte du facteur Rh par Landsteiner et Wiener on a constaté que la répartition sur le globe terrestre est différente d'une population à l'autre. Au niveau mondial la fréquence des phénotypes est approximativement de 84% Rh+ et 16% Rh-. En Roumanie les fréquences sont relativement rapprochées de ces valeurs: 86,78% Rh+ et 13,22% Rh-. La valeur moyenne du Rh+ en Europe est d'environ 85%. Comparativement, chez les Asiatiques, Africains, Australiens et Américains existent des écarts remarquables. Ainsi, les noirs de Brésil et Amérique du Nord ont 92% le facteur Rh+, les noirs de Guinée africaine 93,9% et les Éthiopiens 95,8% Rh+ (Mihăilescu 1958:10). En Asie chez les Chinois, Indiens, Indonésiens et les Nippons s'enregistrent 99% Rh+. En Australie, chez les Australiens autochtones et chez les Papous on a trouvé dans certains endroits, un pourcentage de 100% Rh+. En Amérique, chez les Esquimaux d'Alaska on a enregistré une fréquence de 99,96% et chez les Mexicains originaires de 100% Rh+ (Vallois 1947:263-268). (tableau 6)

Dans son travail sur Rh, Vallois mentionne aussi quelques fréquences de Rh+ et Rh- qui ont été appréciées sur quelques populations européennes: Anglais 85,2% Rh+ et 14,8% Rh-; Français 83,1% Rh+ et 16,9% Rh-; Allemands 84,6% Rh+ et 16,0% Rh- etc. Vallois apprécie les recherches et les travaux abondants concernant le facteur Rh et souligne que Rh- c'est une caractéristique spécialement pour les populations blanches (Vallois 1947:263-268). Le cas des basques, une vieille population de Pyrénées occidentales, localisé en Espagne et en France, vient soutenir cette hypothèse: caractérisés par une augmentation forte du groupe 0, les Basques ont aussi la plus grande fréquence de Rh- qui dépasse 50%, ceux de l'Espagne septentrionale enregistrant 53,1% (Marquer 1967:168-169; Dubinin 1982:142-175).

En ce qui concerne la population roumaine, sa position dans le contexte des fréquences présentées pour les autres populations européennes, avec 86,78% Rh+ et 13,22% Rh-, démontre l'appartenance au type européen et que les valeurs enregistrées s'harmonisent avec les autres valeurs qui caractérisent la zone géographique où nous sommes placés.

Tableau 6

La répartition du Rh en Europe et en autres parts du monde

Nº	Peuples	L'Auteur	Échantillon	Rh+	Rh-
1.	Suédois	Grub, 1953	10222	82,5	17,5
2.	Norvégiens	Hartman, 1949	24051	84,6	15,4
3.	Allemands	Dahr, 1942	1756	84,0	16,0
4.	Hollandais	Graidon, 1945	130	84,6	15,4
5.	Belge	Moureau, 1952	3935	82,4	17,6
6.	Français	Moullec, 1952	21642	84,1	15,9
7.	Anglais	Race, 1945	927	85,2	14,8
8.	Portugais	Maia, 1951	1336	85,4	14,6
9.	Espagnoles - Valencia	Mata de la Campo, 1949	1104	86,8	13,2
10.	Italiens du Rome	Siciliano et Muttigo, 1951	3300	87,7	12,3
11.	Suisse Zürich	Hassig, 1952	5220	84,3	15,7
12.	Autrichiens - Vienne	Speiser, 1951	10000	82,9	17,1
13.	Hongrois	Backhaus, 1949	3152	83,1	16,9
14.	Tchécosloaques	Raska, 1948	2120	84,7	15,3
15.	Polonais	Kelus, 1953	10000	83,1	16,9
16.	Yugoslaves - Belgrade	Simonovic, 1953	20000	83,8	16,2
17.	Roumains	Vulpe et colab., 2015	92321	86,8	13,2
18.	Russe	Umov, 1951	643	83,1	16,9
19.	Argentins	Etcheverry, 1947	1272	84,7	15,3
20.	Noirs du Brésil	Silva, 1948	148	92,6	7,4
21.	Blancs des USA	Wiener, 1945	1468	86,7	13,3
22.	Noirs des USA	Wiener, 1944	233	91,9	8,1
23.	Noirs du Guinée	Gouveia, 1950	214	93,9	6,1
24.	Éthiopiens	Stein, 1953	878	95,8	4,2
25.	Indiens purs	Wiener et Motson, 1942	120	99,1	0,9
26.	Chinois	Levine et Wong, 1943	150	99,3	0,7
27.	Indonésiens	Simmons et Graydon, 1945	296	99,3	0,7
28.	Japonais	Graydon et Simmons, 1945	400	99,7	0,3
29.	Filippins	Simmons et Graydon, 1945	100	100,0	0
30.	Maoris	Graydon et Simmons, 1946	267	100,0	0
31.	Papous	Graydon et Simmons, 1944	455	100,0	0
32.	Fidjiens	Graydon et Simmons, 1945	200	100,0	0
33.	Australiens	Simmons et Graydon, 1944	281	100,0	0
34.	Indiens du Mexique	Wiener, 1945	98	100,0	0

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BODY IMAGE DIMENSIONS AMONG ROMANIAN ADOLESCENTS

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The first part of the article explores briefly the current body of relevant literature on body image and the factors shaping its development. This theoretical framework serves as foundation for our own research among adolescents, which tries to identify their vulnerability – according to gender and body composition – to unhealthy methods of weight control and poor self-esteem, both producing serious physical and psychological impairment. A total of 409 subjects (boys and girls) living in urban area (Bucharest and Ploiesti cities), aged 12 to 19 years, participated in the study. Anthropometrical parameters (body weight, height) were collected and body mass index was interpreted using the cut-off points established by Cole and Lobstein in 2012. An interviewer-administered questionnaire was used, including questions about their bodily practices (physical activity, eating habits), but also standardized tests for assessing various body image dimensions (*Stunkard Figure Rating Scale*, *Rosenberg self-esteem scale*, *The Body Image Avoidance Questionnaire* developed by Rosen, Srebnik, Salzberg, and Went in 1991, and the *Body Part Satisfaction Scale* elaborated by Cash, Winstead and Janda in 1986). The results support the existence of some consistent gender differences in weight stigmatization and coping with body distress. Knowledge of such data could help experts to design more efficient policies and interventions to reduce body dissatisfaction and associated unhealthy behaviors amongst the young.

Key-words: body image, adolescents, healthy behaviors, self-esteem, and body avoidance.

INTRODUCTION

In Romania, the phenomenon of body emancipation appeared after the 90s, being experienced differently by the two genders. With the repeal of the in-famous Decree 770 from October 1st 1966 and the legal import of contraceptives, female body ceased to be a tool for the pro-natalist policy and began to be cultivated according to Western ideals of beauty and attractiveness. Contemporary Western society defines female body mainly as an aesthetic object, to be judged by very

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precise and rigid standards regarding the ideal size and shape. The focus on aesthetic qualities of the body and the low importance placed on its functional qualities generate a low level of body esteem, body dissatisfaction, body monitoring and a sense of shame that finally lead to unhealthy weight control behaviors and eating disorders (Frederickson & Roberts, 1997; McKinley, 1998; McKinley & Hyde, 1996; Strelan, Mehaffey & Tiggemann, 2003). Despite these risks, body dissatisfaction is tirelessly cultivated in order to ensure an ever-broader consumer market. With the increasing departure of the beauty norm from the biological reality, a whole economy (based on cosmetic products, diet pills, diuretics, vomitives, steroids, physical training and surgery) is fed by a discontent that became normative and pervasive.

Adolescence is a development period marked by considerable physiological and psychological changes, in which young people become aware of their bodies and very receptive to others' evaluations and recommendations. As part of self-image, body image largely results from internalizing the opinions of significant others (family, friends, media). In so far its representations and practices are products of the social, cultural and historical contexts, the body becomes a witness of its time; therefore, understanding the adolescents' relationship with their bodies might highlight a particular vulnerability (since their socialization process took place exclusively in the economic and cultural transition) especially visible in the gap between the family models, those advocated by the media, and the ones provided by school.

The subject of body image and its associated practices came recently to the attention of the Romanian researchers so that the dedicated literature is still scarce (Cristina Nanu, Diana Taut and Adriana Baban 2013, 2014; Cristina Nanu and Ioan Scheau 2013; Eugenia Cristina Dreghiciu 2013 – doctoral thesis; Diana Jivănescu 2011 – doctoral thesis). However, an anthropological approach to body representations and practices benefits from the contribution of many converging fields, so it finally integrates the results of a wide range of researches. Romanian auxology revealed, through a series of studies (Maria Cristescu 1969; Theodor Enăchescu *et al.* 1968; Cristiana Glavce *et al.* 1996; M. Andrei și Cristiana Glavce 2004; Brighitha Vlaicu 2000; Maria Știrbu 2002; Maria Știrbu *et al.* 2003), certain evolutionary trends of the anthropometrical and physiological parameters (such as earlier sexual maturation, increasing average values of height and weight – all circumscribed to the phenomenon of acceleration in growth and development). Researches on obesity and other nutritional disorders (Elena Radu *et al.* 2006-2007, Oltea Joja 2006), conducted in Romanian young and adult populations, were able to provide relevant information on the incidence of these pathologies, and on the endogenous and exogenous factors involved. Last but not least, ethnographic studies contributed to a better understanding of popular and traditional conception about health and sickness, body modification practices or cultural variation (across time and space) of aesthetic ideals (Constantin Barbulescu 2005).

BODY IMAGE – DEFINITION, DIMENSIONS AND ASSESSMENT

The most widely used definition of body image reflects the multidimensional character (perceptual, attitudinal) of the concept. According to it, body image encompasses a person's perceptions, thoughts, and feelings about his or her body (Grogan 2008: 3). However, this description omits the behavioral dimension and hardly reflects the impact of interaction with others, therefore integrating the way the individual is or thinks is seen by the others, as Paul Schilder has emphasized right from the beginning of his pioneering work. There is also a strong temptation, since most of the research today is focused on the weight-related body dissatisfaction, to limit the body image to some esthetic characteristics of the person. This is the reason for which we must evoke here a broader definition, hoping to do some justice to the usually ignored aspects, such as the mutual influence of certain illnesses and body image: body image is the mental image of one's self, including attitudes and perceptions of one's physical appearance, state of health, skills, and sexuality (Luskin Biordi & Mccann Galon 2011: 134). Another important accent required is the phenomenological distinction between the objective body, viewed as a physiological entity, and the phenomenal, which is the body as it is lived: body image refers to the multifaceted psychological experience of embodiment, especially but not exclusively one's physical appearance (Cash 2004: 1). Body image is therefore a subjective representation, sometimes in a total dissonance with the objective or social "reality" of the appearance. The ways in which the body is experienced and evaluated depends on many psychological and sociological factors.

It is now accepted that a multidimensional concept like body image requires complex and sophisticated methods of evaluation. Faced with the tremendous increase in number of the instruments assessing the multiple dimensions of body image, we are obliged to pay greater attention to the specific aspects that the current tools actually measure in order to avoid confusion or misinterpretation. The insistence on such aspects should not be then considered unnecessary and pedantic, since mislabeling was recognized as a basic mistake in the research field (Thompson 2004: 8).

Although the perceptual component of body image disturbance was initially difficult to measure, recent technological and methodological progress has revived the research into this field and thus a series of meta-analysis have been able to establish with arguable certainty the relationship between distortion of body size – defined as the difference between a person's actual size and the subjective judgment of that size – and food pathology. Overestimation of body size proved to be a predictive factor both in the development of eating disorders and the lack of clinical improvement or early relapse following hospitalization (Gardner 2011: 146). The methods for measuring body size distortion fall roughly into two categories: those developed to assess specific areas of the body (chest, waist, hips, thighs, etc.) and those for the whole body. The former class includes techniques

such as the *movable caliper technique* (Reitman & Cleveland, 1964), the visual size estimation procedure (Ruff & Barrios, 1986), the very similar *adjustable light beam* (Thompson & Spana, 1988), the *image-marking procedure* (Askevold, 1975) or computer-based methods of distorting body images (Hennighausen & Remschmidt, 1999; Harari and Furst, 2001; Sands, Maschette & Armatas, 2004; Aleong & Duchesne, 2007). The latter class circumscribes methods such as the digital photography technique (Shafran and Fairburn, 2002), the distorting video software (Gardner and Boice, 2004), and some figural drawing / silhouette scales designed to measure not only body dissatisfaction but also body size distortion such as the BIAS-BD Figure Drawing Scale (Gardner *et al.*, 2009) (Gardner 1996: 328; Gardner 2011: 147-148). With the refining of assessing instruments, several techniques (such as the method of constant stimuli, the signal detection theory, and adaptive probit estimation) have been developed to avoid errors of anticipation (Gardner 2011: 149). The differential measurement of the sensory components (meaning the visual system responses) and the non-sensory components (meaning the cognitive and affective ones that interpret the visual input), allowed researchers to invalidate the hypothesis that distortion in body size reported amongst people with anorexia would be due to differences in sensory sensitivity (Ibid. 2011: 151). Rather than the perceptual distortion, the disturbance in body and weight attitudes is now considered essential to the etiology of eating disorders.

Successively, the attitudinal component of body image was differentiated in terms of its subcomponents: evaluative, affective, cognitive and (sometimes included) behavioural dimensions. The most popular and easy method to tap the evaluative subcomponent is represented by the figural scales (such as the nine-figural scale developed by Stunkard *et al.* in 1983) depicting human silhouettes of various sizes (beginning with thin, underweight figures and finishing with heavy, overweight ones), from which the individuals are asked to choose the one that represents most accurately their current size and the one that represents their ideal. The difference between the two (the discrepancy from a personal ideal) is used to determine body satisfaction or dissatisfaction. Another method to assess body dissatisfaction either towards overall appearance, or liked to specific body areas, consists of questionnaire measures using likert-type scales or agree/disagree statements. One example of instrument proving a global estimation of body satisfaction is “the Self Image Questionnaire for Young Adults” designed by Petersen *et al.* in 1984, while “The Body Parts Satisfaction Scale” developed by Berscheid, Walster & Bohrnstedt in 1973 (or any other subsequent adapted or revised forms) is able to offer site-specific information regarding satisfaction or dissatisfaction. Emotional distress related to appearance (the level of stress, anxiety, shame or discomfort) is also evaluated by the means of particular scales, such as *The Physical Appearance State and Trait Anxiety Scale* developed by Reed *et al.*, 1991, an instrument meant to appraise the anxiety regarding weight and other aspects of appearance. The cognitive component required the development of some measuring tools for the beliefs and thoughts about the appearance and its

significance, but also about body ideals, self-schema and attributional style (eg subject ascribe his/her exclusion from a group to an a physical defect). Examples of such scales are *The Body Image Automatic Thoughts Questionnaire* (Cash, Lewis, and Keeton, 1987) or *The Assessment of Body-Image Cognitive distortions scale* (Jakatdar, Cash, and Engle, 2006) (Shroff *et al.* 2009: 126-127).

The behavioural component (integrated by some researchers into the attitudinal dimension) circumscribes all the manifestations of body image disturbance, namely the behaviors designed to monitor / check the condition of the body, to correct the defects or to avoid all the situations that may cause body image distress. One of the first tools developed to assess this dimension was *The Body Image Avoidance Questionnaire* (Rosen, Srebnik, Salzberg, and Went, 1991), a 19-item test that deals with avoidance of tight-fitting or revealing clothes, avoidance of social outings or physical intimacy, food restriction, grooming and weighing. Another instrument is *The Body Checking Questionnaire* (Reas, Whisenhunt, Netemeyer and Williamson, 2002), a 23-item test that measures general appearance checking, verification of specific body parts and control idiosyncratic rituals. Although there are few questionnaires focusing exclusively on the behavioral aspect, some screening tools for body dysmorphic disorder, such as *The Body Image Disturbance Questionnaire* (Cash, Phillips, Santos, and Hrabosky, 2004) also includes this component (Ibid. 2009: 127).

BODY IMAGE AND HEALTH BEHAVIOURS

Body dissatisfaction was directly linked to the adoption of unhealthy weight control behaviors (unbalanced food restriction, use of diuretics and vomitives) and eating disorders (anorexia, bulimia, compulsive eating), with at least dramatic if not fatal effects on health (malnutrition, electrolyte disturbances, muscular, skeletal, cardiac, gastrointestinal, respiratory, renal, immunological, hematological, neurological, endocrine, genital diseases – infertility and increased risk of miscarriage, physical and / or mental retard of the child).

Research suggests that negative body image and eating disturbances can increase the risk of smoking initiation in adolescent girls (Stice & Shaw 2003: 129). Fear of gaining weight can also influence the decision to quit smoking, when people perceive that smoking controls body weight (King *et al.* 2005: 19).

Although weight dissatisfaction operates in some cases as a motivating factor to exercise, excessive concerns regarding exposing/revealing the body can prevent people from participating in organized sports activities (Grogan 2006: 525).

Besides weight, there are many sources of distress related to appearance: facial features, skin, muscles and tone. In males, starting with the teenage years, body dissatisfaction with the muscular mass was associated with the increasing use of steroids, a considerable risk factor for high blood pressure, heart disease, blood clots, stroke, liver damage, stunted growth, and some types of cancer.

International studies have revealed the growing popularity of cosmetic surgery in both sexes. Nowadays a substantial number of girls resort to liposuction, rhinoplasty, breast modification (especially through augmentation), hair removal and acne treatments. While most cases of body dysmorphic disorder occurs in adults, there have also been cases among adolescents; in addition, adults with this disorder have indicated middle adolescence as the onset of the symptoms.

We can therefore conclude that adolescence constitutes a period of increased risk in installing eating and body image pathology.

FACTORS CONTRIBUTING TO THE DEVELOPMENT OF POOR BODY IMAGE

A multitude of biological, psychological, sociocultural, and interpersonal factors were implicated in the development and maintenance of body dissatisfaction.

Traditionally, poor body image was considered a gendered prerogative. This is no longer the case, as researches showed that boys and men also suffer from body dissatisfaction. Nonetheless, there is quasi-general agreement that between the two genders there are differences as concerns the level of body dissatisfaction (in general, girls were more dissatisfied with their bodies), the direction of this dissatisfaction (boys were equally dissatisfied with their underweight or overweight) and the context of its expression (although clearly preoccupied with their bodies looking socially acceptably slender and muscular, men and boys are more willing to discuss the topic with a functional, athletic context) (Tiggemann *et al.* 2008: 1164; Grogan and Richards 2002: 230). In addition, body dissatisfaction is influenced by adherence to traditional gender roles. The traditional role of women is characterized by the following norms: *invest in appearance and thinness, modesty, domestic, care for children, romantic relationships and sexual fidelity*. Traditional male gender role involves *winning, emotional control, risk taking, violence, dominance, playboy, self-reliance, primacy of work, power over women, disdain for homosexuals, and pursuit of status* (Murnen & Don 2012: 131).

For the development of body image in adolescence not only gender is important, but also weight. Research results have shown that, in general, adolescents with an increased BMI experience a higher level of body dissatisfaction (Jones, Vigfusdottir & Lee, 2004: 335). The relationship between BMI and body esteem is, according to some authors, linear for girls (they experiencing lower body esteem with increasing BMI) and curvilinear for boys (they experience a low body esteem if they are either underweight or overweight) (Holmqvist Gattario 2013: 17-18). Because of weight stigma, overweight adolescents are more prone to negative body image and more exposed to teasing and ridicule by their congeners. However, the perceived pressure to be thin proved to be a predictive factor more important than BMI in installing body dissatisfaction (Stice and Whitenton, 2002: 676).

Another individual characteristic incriminated amongst those who affect body image is the pubertal status. While impact of pubertal timing on body image disturbances is still controversial, some results support the idea that precocity or lateness of body maturation could influence self-esteem. One possible but not exclusive contributor is body esteem: the increase in adipose tissue normally associated with adolescence could be interpreted by those who experience this weight gain as moving the maturing body away from the beauty ideal (this is usually the case with girls, except for the breast enlargement) or as bringing it near the desired frame (as is most often the case with boys). However, the reversed effects in both genders should not be ignored. Among boys, early maturation may be associated with increased popularity, higher self-esteem and self-confidence, but also with academic problems, delinquency and substance abuse. Among girls, the initial feelings of pride (that they are becoming women) can easily be compromised by teasing or unwelcome sexual advances, generating anxiety, depression, behavior disorders, substance abuse, suicide attempts and delinquency. Late maturation could also bring troubles for both sexes: low social competence, low popularity, more conflicts with parents, increased internalization, high alcohol consumption and increased probability of steroids use for boys and lifetime depression, high levels of self-awareness and more conflicts with parents for girls (Dusek & McIntyre 2009: 330-333).

Self-esteem is a widely cited factor linked to body dissatisfaction; given the close relationship between body image and self-concept, it's no surprise that low self-esteem is associated to poor body image. The researches evinced that among adolescents, body dissatisfaction actually precedes a low level of self-esteem (Grogan 2008: 194). On the contrary, an increased self-esteem is – alongside resistance to internalization of the thin ideal, and beliefs about personal control and mastery over the body – the most important predictor of positive body image (Ibid. 2008: 193).

Among the psychological factors that influence body image, along with adherence to sociocultural beauty standards (acceptance and internalization of the thin or muscular ideal) and the appeal to unfavorable social comparisons, perfectionism is associated with lower body satisfaction and unhealthy weight control behaviors. The very high and rigid expectations related to personal success and the limited tolerance to failure make this personality trait an important predictor in eating disorders (anorexia nervosa, bulimia and muscle dysmorphia, considered as reversed anorexia). Similarly, neuroticism (a construct that defines negative affect, self-consciousness, anxiousness, and oversensitivity to criticism) is associated with an increased body dissatisfaction when body size or shape does not match the ideal, being identified in anorexia nervosa, bulimia nervosa and body dysmorphic disorder (women report a higher desire to lose weight and men a stronger motivation to enlarge their muscle mass). Although self-focusing and vanity generally enhance body esteem, narcissism could become maladaptive when these attributes are manifested without moderation. They are associated with

resentment, interpersonal friction and increased involvement in body checking behaviors, regardless of the presence of eating disorders (Dionne & Davis 2012: 136-8).

We should not lose sight of the subjective nature of the construct of body image, but emphasize one more time that body satisfaction reflects not necessarily the biological particularities of the body but the socio-cultural valorization of these particularities. The attitude towards the body and practices in which it is involved (including the appearance-management behaviors) mirror the dominant value constellation in the society in which the individual lives. Complex considerations regarding food availability, energy balance in traditional and modern occupations, and a series of ethical, political or ideological assumptions are responsible for these changes in body ideals. Within them we can include the prevalence of individualism (which emphasizes personal responsibility in managing the appearance but also the value of difference) or collectivism (which favor conformism and social comparisons), the relationship with the hegemonic culture (the development of critical spirit or the internalization of dominant standards and ideals), the symbolic meanings of fatness (health and welfare versus low level of self-discipline, laziness, and lack of control).

Three main channels are used for the socio-cultural transmission of the body ideals: family, peers and mass media.

Family shapes the attitudes towards appearance and plays an important role in the development of gender roles. Its operating mode involves active influences (body-related teasing or criticisms regarding clothing choices, physical activity and eating habits of children), modeling effects (children observe and learn the parents' attitudes and behaviors towards their own bodies), and family interaction (overprotective or uncommunicative families, those marked by domestic violence or alcohol / drug use are associated with increased levels of body dissatisfaction; an insecure attachment may also generate uncertainty about personal appearance). Some studies reported gender differences in parental influences on adolescent body dissatisfaction, while others not.

Appearance conversation with friends as well as peer appearance criticism directs the adolescents' attention to issues of physical appearance, reinforcing the importance placed on narrow societal standards. Bullying and teasing (on weight, body constitution or facial features) are relatively common experiences among adolescents and are associated with low body esteem. Another mediating mechanism is provided by the social comparison, used by the youth as a means of gathering essential information for developing a sense of personal identity. Self-evaluative comparisons with media's unrealistic models usually result in increased body dissatisfaction. But the comparisons with friends or colleagues who are considered more attractive and popular can throw the teenager in an endless race after a positive feedback too. Within peer groups, researchers have identified similar levels of appearance concern, similar weight loss behaviors, similar levels of depression and self-esteem. The explanation takes into account both the possible

effect of group membership and the selection mechanism of friends (their choice was based on a previous similarity of attitudes) (Shroff & Thompson 2006: 534). A relatively small number of studies has focused on the positive influences of peer group. Thus, having a friend who is not concerned about weight, having a friend who is overweight or receiving anti-diet tips from a friend are protective factors of body satisfaction and self-esteem, which reduce the likelihood of adopting unhealthy weight control behaviors.

As regards media influence, research has discovered a direct relationship between media exposure and eating pathology. Program contents and not the time spent watching TV is correlated with body dissatisfaction and slender obsession among girls. Decrease in body esteem after watching idealized portrayals was more pronounced in people with previously recorded vulnerability. More recently, studies have indicated a significant association of time spent on social networks sites and internalization of the thin ideal, body surveillance and drive for a slim silhouette (Tiggemann & Slater 2013: 630). The use of photo applications on Facebook network has been investigated, revealing significant correlations with weight dissatisfaction, drive for thinness, thin ideal internalization, and self-objectification in adolescent girls (Meier & Gray 2013: 199).

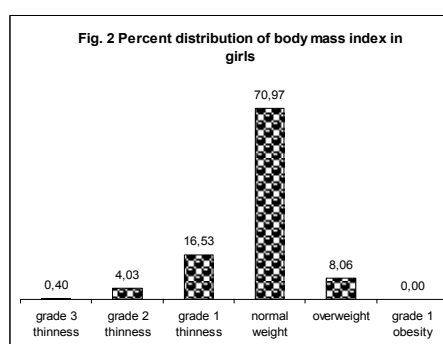
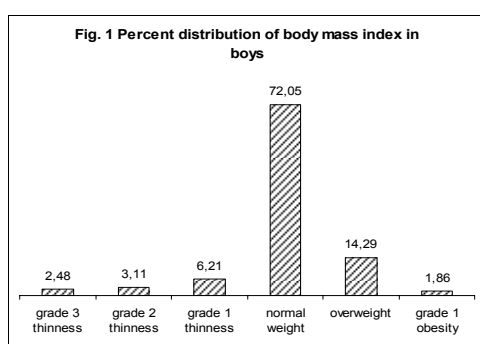
MATERIAL AND METHOD

The aim of the study was to identify the level of body satisfaction among adolescents in urban areas, differentiated by gender and body composition, and their vulnerability to poor self-esteem and health-risk behaviors, such as the adoption of unhealthy methods of weight control.

The research was based on anthropometrical data collection and the application of questionnaires that included standardized tests for assessing different dimensions of body image. Weight status was determined using the international BMI cut-off points for male and female children under 18 years established by T. J. Cole and T. Lobstein [Cole & Lobstein, 2012: 284]. To evaluate the level of global subjective satisfaction we used the Figure Rating Scale (FRS), developed by Dr. A. Stunkard (1983), validated by Thompson and Altabe (1991), and correlated with BMI for the Caucasian population by Bulik *et al.* (2001). To assess subjects' satisfaction regarding various parts or aspects of their bodies, we chose the Body Parts Satisfaction Scale (BPSS) (Berscheid *et al.*, 1973), while the behavioral component of body image was explored through The Body Image Avoidance Questionnaire (Rosen *et al.*, 1991). Self-Esteem was measured using Rosenberg Self-Esteem Scale (1965). These instruments have been supplemented by a series of questions on their health-related habits, from which we selected for the present study those that focused on the weight-control behavior.

The lot consisted of 409 subjects from high schools in Bucharest and Ploiești (248 girls and 161 boys) aged 12-19 years (the mean age was 16.47). Similar

percentages of normal-weight subjects were recorded among both genders (72.05% among boys and 70.97% among girls). However, the other weight categories display different distributions: while boys prevail in the overweight and obesity classes with a double percentage (16.15 to 8.06), girls prevail in the underweight classes (20.96% versus 11.80%). While not proof in itself of a conscious weight management among the female teenagers, this distribution might indicate a possible influence of the increasing slimmer female body ideal upon individual aspirations; it is surely consistent with the current trend in normative female body (Fig. 1 & 2).



RESULTS AND DISCUSSIONS

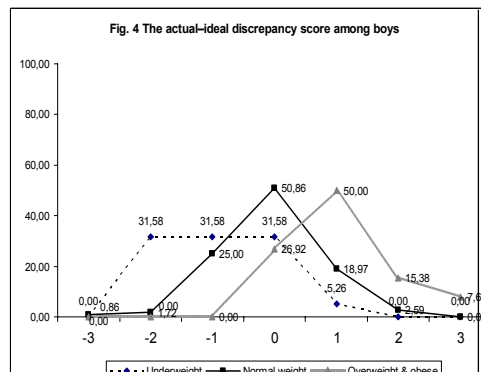
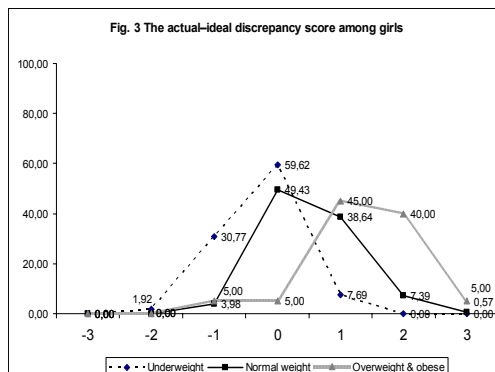
Consistent with literature, in all the BMI categories, most of the girls chose the silhouette No. 3 as their personal ideal: 56.25% of normal weight participants, 65.38% of underweight and 60.00% of the overweight ones. The next place among their preferences was occupied by the silhouette No. 2, with a popularity of 36.93% of normal weight adolescents, 30.77% of underweight and 25.00% of overweight subjects. Data support the hypothesis of a growing desire to be thin in females, taking into account that only 31.25% of normal weight, 36.54% of underweight and 45.00% of overweight girls considered this body contour as “too thin”. A growing intolerance to fat could be reflected in the slightly narrowing of the normal range of silhouettes: 6.82% of normal weight, 3.85% of underweight and 5.00% of overweight girls considered the silhouette No. 4 “too heavy”. Therefore there was no surprise that none of the female participants has nominated as her ideal any silhouette corresponding to overweight ($\geq$ No. 5).

Among boys, we did not record a similar agreement on ideal body size across all weight categories. In the normal weight class the first position was occupied by the silhouette No. 4 (44.83%), followed by the silhouette No. 3 (37.07%); in the underweight class on top of the preferences we found the silhouette No. 3

(42.11%), followed by the silhouette No. 4 (36.84%); in overweight class, most of the respondents chose silhouette No. 4 (38.46%), followed by the silhouette No. 5 (30.77%). So, while normal and underweight male adolescents expressed a preference for normal to thin-body frame, the overweight subjects manifested a preference for normal to heavy-body frame. The relevance of such information is undeniable, either proving the existence of a wider range of normal representations for male subjects, or supporting the hypothesis of a self-hopeful approach to the weight issue among boys and men (exceeding the comparison tendencies). Where female subjects are only self-critical and set themselves high and frustrating targets, male counterparts adopt more realistic ideals (nearer to their current status), thus better protecting their body satisfaction. This account will receive further evidence in the next section when we will discuss self-discrepancy scores.

Analysis of the discrepancy scores showed that in both sexes relatively close percentages were satisfied with their current figure (44.72% of boys and 47.98% of girls). Also, as clearly stated by literature, body dissatisfaction among girls was mainly related to the aspiration towards developing slimmer physiques (41.94% of the total female sample wanted to lose weight), while among boys aspiration towards a more developed muscular mass (recorded in 27.33%) almost equalized the desire to get rid of the excess fat (expressed by 27.95%).

But if we consider the weight status, we will discover other significant differences between the sexes. Among normal weight adolescents, twice as many girls than boys wanted to be slimmer (46.03% to 21.56%), indicating a much wider adherence to the slender ideal. This rising and spreading desire to lose weight without any medical justification (but with the risk of slipping into underweight) was constantly reported by researchers worldwide as a negative consequence of the proliferating narrow beauty standards. The wish of near 25% of normal weight boys for a larger silhouette could be interpreted as an insufficient differentiation between enlargement of the body frame – as a result of muscle mass growth – and weight gain; an inadequacy of the chosen measuring instrument (the figural scale) is also possible. Among underweight participants, a nearly double percentage of girls were satisfied with their current figure (59.62 versus 31.58), while a double percentage of boys wished to gain weight (32.69 versus 63.16). In this particular case, the female discrepancy score of zero did not translate a beneficial body satisfaction, but one that created or maintained unhealthy weight control behaviors. Instead, male body dissatisfaction (linked to the aspiration towards a silhouette within the normal range) could be a motivating factor for healthy behavior (if artificial methods of developing muscle mass were avoid). Among overweight subjects, boys were more satisfied with their current body size than girls (26.92% compared to 5%) and the proportion of those who wanted to lose weight drastically (discrepancy score 2 and 3) was also reduced to half (23.07% in comparison with 45%) (Fig. 3 & 4).



An F-test two-sample for variances was run in order to determine whether variances in our subsamples by weight status and gender are equal; then, an independent-sample T-test was used to check the impact of weight upon BPSS scores in both sexes, but no significances were found except for the overweight class, indicating a particular vulnerability of these girls to the fat issue (Table 1).

Table 1

Body Parts Satisfaction Scale Scores by Gender

Weight status	Girls			Boys					
	<i>n</i>	<i>Mean</i>	<i>SD</i>	<i>n</i>	<i>Mean</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Underweight	52	116.02	22.5	19	115.11	20.25	0.16	69	0.877
Normal weight	176	111.55	28.52	116	108.14	32.68	0.40	290	0.686
Overweight	20	100.90	25.67	26	118.62	28.71	-2.17	44	0.035
Total	248	110.92	27.31	161	110.65	30.98	-0.1	407	0.889

Analysis of self-esteem level revealed significant difference between the two sexes, with the lowest value recorded also in the overweight female adolescents (Table 2). Therefore, we investigated a possible correlation between self-esteem and satisfaction towards physical appearance, but the correlation coefficients did not point out any but weak correlations between the BPSS score and Rosenberg score (Table 3).

Table 2

Rosenberg Scores by Gender

Weight status	Girls			Boys					
	<i>n</i>	<i>Mean</i>	<i>SD</i>	<i>n</i>	<i>Mean</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Underweight	52	29.87	4.28	19	32.37	3.65	-2.26	69	0.027
Normal weight	176	30.40	4.85	116	31.66	4.29	-2.26	290	0.025
Overweight	20	29.20	5.23	26	32.81	3.73	-2.73	44	0.009
Total	248	30.19	4.76	161	32.04	4.13	-3.90	374	0.0001

Table 3

Correlation between BPSS score and Rosenberg score

<i>Weight status</i>	Girl			Boys		
	<i>df</i>	<i>r</i>	<i>p</i>	<i>df</i>	<i>r</i>	<i>p</i>
Underweight	51	0.41	0.002	18	0.41	0.081
Normal weight	175	0.23	0.002	115	0.22	0.018
Overweight	19	0.31	0.179	25	0.15	0.461
Total	247	0.26	3E-05	160	0.23	0.002

Analyzing BIAQ scores by gender, we found significant differences only in the overweight category, suggesting a stronger association of weight concerns with body image avoidance behavior in girls. This outcome is relatively predictable, since current trends favor a very slim silhouette for female gender and among boys it is easier to confuse a slightly overweight figure with a robust, muscular body contour (Table 4).

Table 4

Body Image Avoidance Questionnaire Scores by Gender

<i>Weight status</i>	Girls			Boys					
	<i>n</i>	<i>Mean</i>	<i>SD</i>	<i>n</i>	<i>Mean</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Underweight	52	24.46	7.57	19	22.11	7.62	1.16	69	0.250
Normal weight	176	28.98	9.82	116	22.57	9.74	5.47	290	9.59E
Overweight	20	37.40	13.19	26	25.85	11.49	3.17	44	0.003
Total	248	28.71	10.17	161	23.04	9.85	5.57	407	4.58E

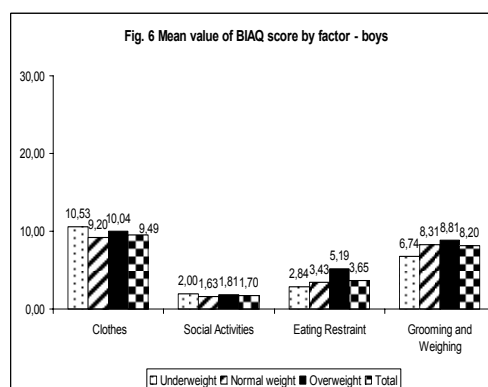
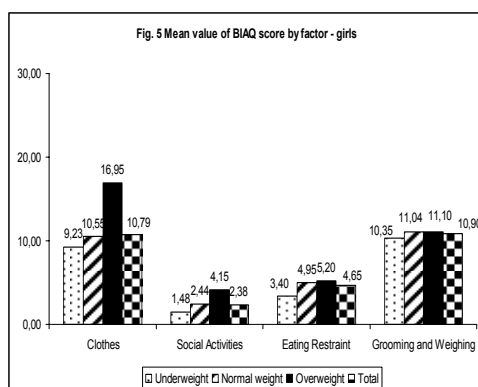
The correlations between the BIAQ score and BPSS score were either weak or insignificant, providing no support for the hypothesis that general level of body satisfaction could be link to avoidance of situations that generate or maintain a high level of concerns about physical appearance. However, the primary reliance on self-report data and the size of subsamples should be treated as limitations to the present study (Table 5).

Table 5

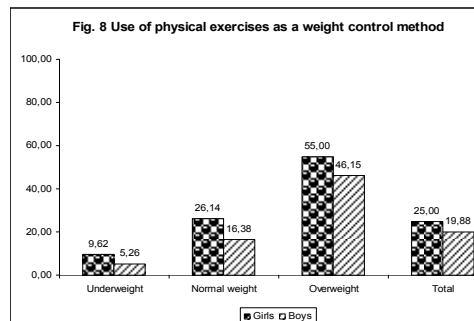
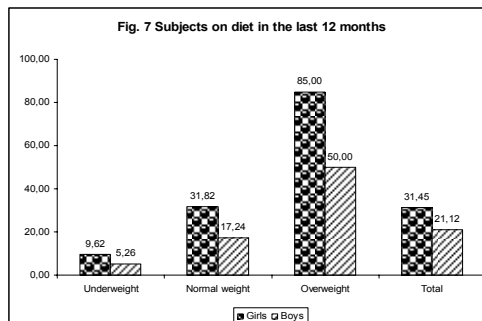
Correlation between BIAQ score and BPSS score

<i>Weight status</i>	Girls			Boys		
	<i>df</i>	<i>r</i>	<i>p</i>	<i>df</i>	<i>r</i>	<i>p</i>
Underweight	51	0.12	0.394	18	0.03	0.904
Normal weight	175	0.21	0.005	115	0.11	0.261
Overweight	19	0.39	0.086	25	0.45	0.021
Total	247	0.25	9E-05	160	0.14	0.076

Although the factors circumscribed to the avoidance behavior scale do not constitute subscales of the test, we also analyzed them separately in order to have a more accurate picture of their dynamics by sex and weight status. Again, what stood out was the tendency among the overweight girls (by comparison with the overweight boys) to use clothing as a way to hide their excess pounds. While avoiding excessive tight-fitting clothing could be a sign of good taste and a successful strategy in increasing their overall impression, camouflaging body through baggy or dark clothes should not be encouraged as appropriate, since it creates an apparent accommodation to the standards, but leaves untouched the source of all concerns. Hiding behind volumes and dark colors operates superficial changes in someone's appearance, while esthetic deviations and medical problems remain unaddressed (Figs. 5 & 6).



Therefore, our study aimed to investigate not only the avoidant and body-concealment behaviors, but also the weight-control strategies (the adoption of restrictive diets, the resort to exercises, the use / abuse of diuretics and emetics). The results have revealed a contagious spread of restrained eating behavior from subjects who needed a diet to those who only want to look slimmer: 31.82% of the normal weight girls and even 9.62% of the underweight girls have followed a diet in the last 12 month. The worrying trend was present in both sexes, but with increased frequency among the girls. As regards other methods of weight control, we are fully aware that shame or guilt might undermine the reliability of self-reported data. Drugs use (diet pills and diuretics) has been scarcely mentioned by our participants: one normal weight and one overweight girl have resorted to diuretics and only two overweight female adolescents have consumed diet pills. Physical activity seems to be the second choice of teenagers when it comes to loosing weight or getting fit. Once again, the practice reflects weight category and gender biases (Figs. 7 & 8).



CONCLUSIONS

Analysis of the attitudinal dimension of body image in our subjects revealed that girls feel a stronger pressure to be weak in comparison with boys, a fact reflected by the large percentages of positive discrepancy scores among all the weight categories. Compared to their male counterparts, female adolescents set themselves narrower ideals regarding weight and shape and subsequently translated their body dissatisfaction into a series of actions meant to control the weight or to reduce the body image distress.

Investigation of the behavioural dimension of body image pointed out that girls and boys had different profiles when coping with the weight distress; BIAQ scores suggested a stronger association of weight concerns with body image avoidance behavior, while the survey of their eating habits and physical activity indicated an unequal resort to restraining dieting and exercise.

The most vulnerable category (to body dissatisfaction, low self-esteem, body image avoidance behavior and self-imposed dietary restrictions) was found to be the overweight girls subsample.

It is our constant belief that only knowledge of such detailed data will provide a more efficient and solid base for future policies and interventions designed to reduce body dissatisfaction in youth and to develop good health habits.

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A STUDY ON ADOLESCENTS' PERCEPTION OF THE FAMILY'S FOOD-SOURCES FROM TWO CITIES IN SOUTH ROMANIA

CRISTIANA GLAVCE, ADRIANA BOROSANU, RICHARD DAVID-RUS¹

We report the results of a study involving 205 subjects (age 14-18 years), from two cities in south Romania. The main objective is to reveal some important aspects of the perception of the sources of food among adolescents. This perception is influenced by different factors such as the existing mental schemas, economic factors and the product supply from industrialized countries in the context of the social and economic transition in Romania. The results show a change in mental schemas in both cities so that the supermarket is perceived as a main food source by a majority of the subjects independent of the urbanization degree of the city and the family income or parents' educational level. For the supply coming from parents' households, our statistical analysis identified significant tendencies of differentiation between categories induced by family income, mother's education or place of origin. The possibility to have a family-owned source of food, apart from its contribution to the strengthening of the family ties, represents in the actual context of economic transition a survival means for the population in the low income group in urban areas and a way of subsistence for the rural population. In the present social and economic context homegrown and organic food consumption is rather a consequence of economic survival than of the awareness of the benefits of this sort of nutrition.

Key-words: sources of food, adolescents' perception, education, social-economic context.

INTRODUCTION

The nutritional need of a population is mainly determined by physiological factors meanwhile the food consumption depends also on economic and socio-cultural ones, being therefore possible to influence it through the food security policy (EU Parliament Study 2007). The specific situation of our country is characterized by the transition towards the globalization of the food consumption

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behavior that involves an increased emphasis on processed food and a more diversified alimentation. In this context the main interest focuses on the double motivation dynamics: the biological motivation expressed through the nutritional needs and the cultural motivation which is given through the integration of the local environment and economy, conditioned by the local social structure in the larger European communitarian space (Carr 2006, Maslow 2007).

In this historical context a first motivational drive is given through the nutritional needs rooted in the traditional alimentation and strongly conditioned through the previous policies. A second drive is reflected in the integration tendency in the Western-like culture characterized by a processed-food oriented nutrition. In the frame of our larger study on the globalization of food consumption behavior in adolescents and children – GDRI project *"Globalization of the food consumption behavior: causes and effects"* (2013-2014), collaborative project between France, Romania, Czech Republic, Bulgaria, Spain and Maroc – we focused our present investigation on the perception the subjects have of the family food sources.

Before 1989, during the Communist regime, the entire Romanian population with the exception of a small privileged group was exposed for a long time to the economic hardships of the totalitarian state. The nutritional needs of the population were satisfied through the rationed food consumption program. Other aliments were produced by the autochthon industry or in state-owned farms in a limited variety and quantity, insufficient to satisfy the needs of the population. No foreign imported products were available on the market.

This situation led to an intensification of the economic ties between the urban and rural population esp. through the family links in order to supplement the missing products on the official market. A significant part of rural population (around 20%) moved into urban area between 1960-1980 (Anuarul Statistic al Romaniei 1996; Anuarul Statistic al Romaniei 2012) preserving the links with their relatives. This way the small subsistence family households continued till present days to be an important food source for some parts of the urban population. The national statistics are relevant in this sense showing that 48% of the Romanian population still retains a strong connection to the rural regions and to small family households (Anuarul Statistic al Romaniei 1996; Anuarul Statistic al Romaniei 2012).

After the fall of the Communist regime in 1990 the transition to a market economy brought an afflux of imported aliments, esp. industrially produced (Anuarul Statistic al Romaniei 1996; Anuarul Statistic al Romaniei 2012). The novelty variety and abundance of these products as well as the aggressive promotion through mass-media and the marketing strategies induced a radical change in the food consumption behavior in the last twenty years. The most vulnerable were the young categories of population: children and adolescents. The image of the Western-world affluence was associated with a higher living standard and emancipation in an idealistic way.

The implementation of the EU policies during the transition period as a precondition of EU membership generated also the existence of high costs for the basic aliments due to the difference between the productions costs and the costs paid by the consumer. Additional costs were added to the production cost (due to transportation, handling etc.) which could be for example as high as 28-62% for milk or 14-82% for fruits (EU Parliament Study 2007).

MATERIALS AND METHODS

We have studied two groups of 205 high-school children (14-18 years old) from two urban areas with different degrees of urbanization: Bucharest a city with around 2 million inhabitants and Ploiesti with around 250,000 inhabitants, a regional administrative center of Prahova County. The distribution of the sample according to place of origin is around 1:1 and according to 1:1.5 boys vs. girls (Table 1).

In order to account for the adolescents' perception of the food sources in their families we used a specific questionnaire. This comprises a set of items gathering information regarding personal identity, parents' social-economic status (level of education, family income) and on the sources of food providing the regular family aliments as well as the importance attributed them by the adolescents.

Table 1

Sample composition on place and gender

		girls	boys
Bucharest	Nr	52	51
	%	25.37	24.88
Ploiești	Nr	71	31
	%	34.63	15.12
Total	Nr.	123	82
	%	60	40

The household income reported by the subjects was compared to the Romanian average gross wage (cca.2.000 lei $\approx$ 440 €). We took into consideration three levels of income: low income under 2000 lei, medium income between 2000 and 3000 lei (440 – 660 €) and high income (over 3000 lei $\sim$ 660 €).

Regarding the level of education, the subjects were distributed according to the parents' education in two categories medium level and high level: comprising the education up to and including a high school degree and the one involving a college degree.

The sources of food were grouped in four categories: supermarket, farmers' market, relatives' (extended family members) households and parents' household (one of the parents as owners) farms. The importance of each category as a source of food was captured through the frequency of supply from that source – 'no use of the source' meaning no supply from this source, 'use in a moderate way' ('sometimes') or the source qualifies as a secondary food source and 'frequently use' of the source or the source qualifies as a main food source. In order to avoid possible confusions between the two distinct questions regarding households (relatives' and parents') due to shared ownership, we generated a new variable by unifying these answers so that it reflects the main information on any household as food sources. For the new variable, the 'frequent supply' (i.e. main source) option was generated if at least one of the previous answers mention this option; the 'secondary source' option was built from previous options that mention at least one time this option and the other answers were not marked as 'main source'; the option 'no source' comprises only the previous answers that mark it for each question.

For the statistical analysis of the data we deployed techniques for categorical data investigation (Agresti 2002). In order to reveal the possible association between variables we computed the chi-square tests or Fisher test for small samples, look for the differences in expected and observed values (standardized Pearson residuals) in different cells and reported odds ratios of relevant sub-tables in order to reveal the strength of the association. Indexes of linear trend as well as other relevant tests in case of controlling for one variable in multi-way tables were also computed. For the computation we used the categorical data analysis packages implemented in R-language (R 3.0 version) as well as the ones from Microsoft EXCEL (Microsoft Office 2010).

RESULTS AND DISCUSSION

The supermarket was perceived as the main food source by the majority of the subjects (79.6% in Bucharest and 79.4% in Ploiesti) and less as a secondary source (20.4% in Bucharest and 19.6% in Ploiesti) (Table 2). No adolescents in Bucharest and only one person in Ploiesti do not regard the supermarket at all as a food source which shows that practically the supermarket is used by everybody as a source of food supply. The tests of association do not provide any significant p-value supporting this way the null hypothesis of independence between the variable locality and frequency of using the supermarket. The single not zero odds ratio for supermarket option OR_12 (Table 3) is around 1 showing this way no difference between the two cities in regard to the ways the subjects regard supermarket as secondary or primary source of food.

Table 2

The distribution of answers for the different sources according to the place of origin and the association testing results (in %; Notation n.s – no significance)

	Place	Farmers' market	Supermarket	Relatives' household	Parents' household	Households (any of the previous)
main source	Ploiesti	48.2	79.6	24.4	36.1	40.5
	Bucharest	50.9	79.4	14.8	26.5	36.3
sec. source	Ploiesti	43.5	20.4	43.6	8.4	35.1
	Bucharest	44.1	19.6	44.5	19.6	43.1
no source	Bucharest	8.2	0	32.1	55.4	24.3
	Ploiesti	4.9	0.9	46.6	53.9	20.6
Tests	Chi-square	n.s		n.s	0.06	n.s
	Fisher		n.s			

Farmers' market seen as the 'main source' of food is placed on the second position after supermarket by 48% of the adolescents in Bucharest and 51% in Ploiesti. A high percentage of them see farmers' market also as a secondary source of food: around 44% in both cities. The percentage of subjects that do not see them at all as a food source is slightly higher in Bucharest (8%) than in Ploiesti (5%) (Table 2). Nevertheless no significant statistical result is revealed by the Chi-square test for association. Due to this twice highest value in the no source option for Bucharest, the odds ratios in the 2by2 sub-tables involving it reach a value of 1.7 (Table 3) but this is not statistically significant.

As concerns the options for households as a sources of food we notice a predilection to see relatives' households as secondary sources (around 44% in both cities) and parents' households as main sources (around. 36% in Bucharest and 26% in Ploiesti) (Table 2). In the same time a high percentage of subjects does not regard them at all as sources of food. In case of the relatives' households this happens for 46% in Ploiesti and 32% in Bucharest while for parents' households the percentage reaches 54% for Ploiesti and 55% in Bucharest. The answers referring to relatives' households do not reveal further statistically significant information but the parents' households indicate a tendency of association (a p-value at the significance limit of 0.06) (Table 2). The category that presents the highest differences between expected and observed values is the 'secondary source' option (with a standardized Pearson residual a bit over 2) for parents' household.

A between-options comparison reveals therefore that a higher percentage in both cities consider parents' rather than relatives' households as main a source (36% versus 24% in Bucharest and 26% over 15% in Ploiesti) meanwhile relatives' households reveal much higher percentages as secondary sources (over 40% in both locations versus 8% & 20% in Ploiesti and Bucharest).

A possible explanation could be found if we consider the different cultural distances between the two cities and the rural areas which are reflected in the degree of cooperation between the members of families living in the two environments (urban & rural). The cooperation between the members of the extended family is reduced in case of Bucharest inhabitants who favor the one in the nuclear family (parents' households). For the subjects in Ploiesti the access to food produced from households (relatives' of parents') is increased due to the still existing ties between members of the extended family. Another factor that might cause this difference might be related to the higher living costs in Bucharest which is affecting the low and medium income categories.

Table 3

Odds ratio values for sub-tables. Notation: 2, 1, 0 code the three options main, secondary and no source; * marks statistical significance at 0.05 confidence limit.

	OR_02	OR_01	OR_12
Farmers' market	1.78	1.70	1.04
Supermarket	0.00	0.00	1.04
<i>Family household</i>	0.48	0.81	0.60
<i>Parents household</i>	0.75	2.39	0.32*
<i>Households (any of the above)</i>	1.06	1.45	0.73

The odds ratios in the 2by2 sub-tables (Figure 1) are suggestive in case of parents' households where the subjects in Bucharest have 2.4 (though not significant at 5% confidence limit) times higher odds to ignore them as sources than to see them as secondary sources in comparison to the subject from Ploiesti and 3 time lower (OR=0.3) to see them as secondary sources than main sources (Table 3). This is due to the sharp drop of the number of subjects from Bucharest who regard parents' households as secondary sources meanwhile in Ploiesti the perception seems to remain the same (20%-25%) between this source as main or secondary.

This difference between the odds ratios regarding the answers of the subjects' from the two samples might be find a partial explanation in the fact (mentioned also in a previous paragraph) that Bucharest is a metropolis which shows a weaker connection with the surrounding regions meanwhile Ploiesti as a regional center better retains its links with the rural regions. This fact generates differences in the structuring of the mentalities including the one related to the adolescents' perception of the food sources.

In order to better reveal the contribution of the households and to avoid a possible ambiguity in the interpretation of the two questions regarding households as sources (the adolescents might interpret as parents' household the ones that present a shared ownership in the extended family) we collapsed the answers of the two questions in one that comprises any type of private household. As a result, households as a sources of food were perceived as being the main sources by 41% of the subjects in Bucharest and 36% in Ploiesti; meanwhile the order changes in case of perceiving them as secondary sources which happens for by 43% of the subjects in Ploiesti and 35% in Bucharest. The number of subjects that do not perceive them as food source at all is almost the same in the Bucharest sample (24%) and in Ploiesti 21% (Table 2). The odds in the sub-table comprising the categories "no source" and 'secondary source' is 45% higher for Bucharest and is only 0.7 for the one in Ploiesti for the sub-table that takes household as secondary and main sources of food. (Table 3). These values support the hypothesis that the subjects from Ploiesti perceive to a greater extend private households in general as food sources than the subjects from Bucharest and this is mainly due to their better connection to the rural world.

THE ANALYSIS ON GENDER

A second focus of our analysis aimed to investigate the gender induced difference. From a dimorphic point of view the male as well as the female samples reveal a similar perception. The statistical analysis did not identified any significant association between the variable gender and the one regarding the use of the different sources but the results for the option parents' households might indicate some tendency. Though the standardized Pearson residuals do not show an extreme value (highest value being around 1.9) the odds ratios in 2by2 sub-tables show (Table 4) a half lower odds for boys than girls (0.49 for the option main source compared to no source and a 0.66 times lower odds for the option 'main source' versus 'secondary source'. These results indicate the difference in perception between boys and girls regarding the appeal to personal farms as a food source.

Table 4

Odds ratio for sex vs. parents' households as food sources

Notation: 0, 1, 2 correspond to the options no source, secondary source, and main source

	OR_20	OR_21	OR_10
pooled	0.49	0.66	0.73
Ploiesti	0.40	0.53	0.75
Bucharest	0.49	0.43	1.12

Taking into consideration the closer link of the older generation with the rural world where the main source of food was the private farm this result might suggest that girls are more inclined to preserve the traditional ties already existing in the family.

From the different factors that can influence the choice of the food-source we further focused on the family income and the level of education of the parents.

THE ANALYSIS ON INCOME CATEGORIES

A first overview on the distribution of the family income reveals the fact that over 60% of the subjects from Bucharest fall into the low income group in comparison to 35% in Ploiesti. Asymmetry on categories of income between the two samples could be seen in the different peaks of the distribution (Figure 2).

This difference between the two samples is also reflected by the different proportion in the education levels of the parents where the group of parents with high education covers 61% in Ploiesti in comparison to 19% in Bucharest. The extreme standardized Pearson residuals shown in the figure below (Figure 3) by cross-classifying mother's education by the income in both cities can be detected in the low income category in Bucharest (a lack of count for the mothers with higher education) and high income category in Ploiesti (an excess this time for the mothers with higher education) but also for the mother with higher education in Ploiesti for all income categories (with lower number for the low income but excess for the other two).

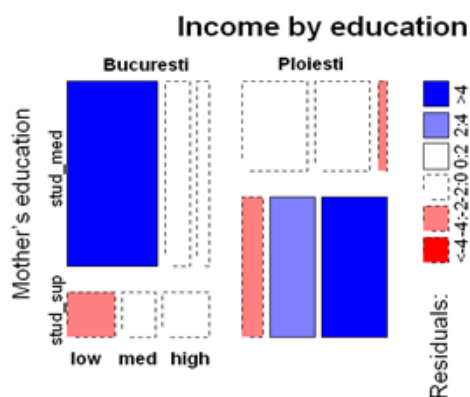


Figure 1. Four-fold plots for parents' household option.

In the following step of the analysis we used the mosaic plot representations (Friendly 1994a, 1999) for all the answer options of the food sources in order to detect deviations from the equilibrium. We found significant deviations for the the

parents' household option (Figure 4): the plot reveals excesses in the low income category in Bucharest for the frequent uses of this source and for medium and high income in Ploiesti for occasionally use and no use at all.

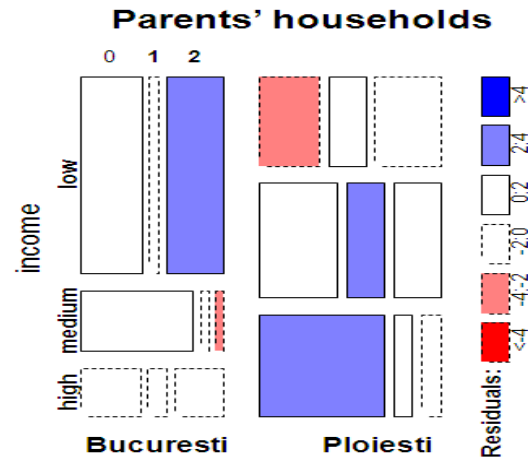


Figure 2. The distribution of the income reveals different picks for the two cities.

The figure below contains the distribution in percentages for this option on the income groups in the two cities:

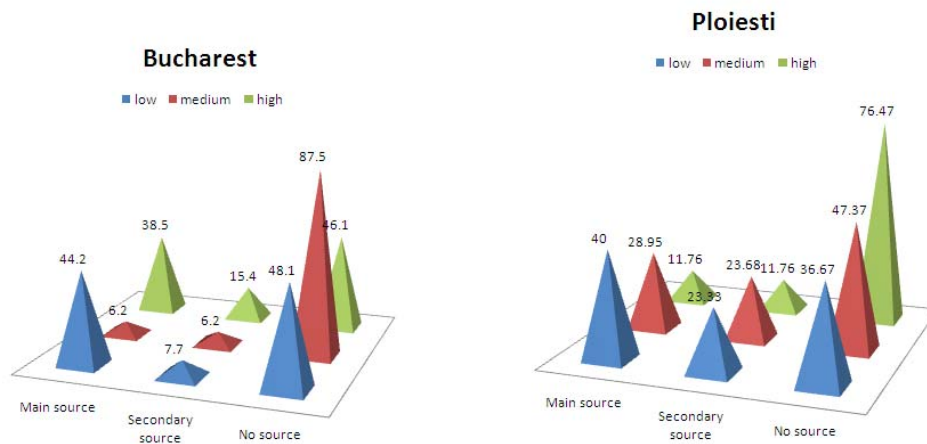


Figure 3. Mosaic plot for the option parents' household as food-source. (Notation: 0, 1, 2 for never, sometimes or frequent use of the source)

One might notice a high percentage (around or over 40%) for using the parents' households as main food-source for the subjects in the low income group

(under 2000 lei) in both cities and in the high income group (over 3000 lei) only in Bucharest. For the low income category the products from these households constitute a way to alleviate the financial burden needed for the living in the cities. For the high income group they are a source of healthy food (organic grown food), which is usually prohibitive for the medium income families (used as food-sources by under 10% in Bucharest). In Ploiesti on the contrary parents' households are seen by 30% resp. 24% as food sources and they become less frequent for the high income group.

For both cities we found statistical significance at the 0.01 and 0.02 level for the Fisher test indicating this way the dependence between the income variable and the frequency of using parents' households as a source of food.

Below are tables containing the testing results:

Table 5

Results for Fischer's exact test

Fisher's Exact Test		
	Bucharest	Ploiesti
Table Probability (P)	6.67E-05	6.90E-06
Pr <= P	0.0245	0.0181

Further testing by controlling for the variable place of origin, the statistics based on the tables in the two cities were also very significant: 0.002 for the hypothesis nonzero correlation, 0.006 raw mean scores difference and 0.03 for general association.

Table 6

Cochran-Mantel-Haenszel Statistics (based on table scores)

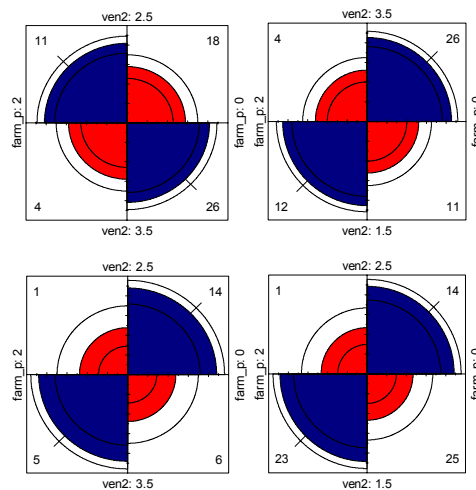
Statistic	Alternative Hypothesis	DF	Value	Prob
1	Non zero Correlation	1	9.309	0.0023
2	Row Mean Scores Differ	2	10.03	0.0066
3	General Association	4	10.56	0.0319

In order to see the strength in the association we looked also at the odds ratio for the 2by2 sub-tables which are shown in the below table and four figures below where we represent the significant odds (marked with *in the table) in using fourfold plots (Friendly 1994b).

Table 7

Odds ratio for income categories regarding parents' households as sources of food
(* - marks significance at the 0.05 level.)

		OR_20	OR_21	OR_10
Ploiesti	med_high	3.97*	1.22	3.25
	high_low	0.14*	0.58	0.24
	med_low	0.56	0.71	0.79
Bucharest	med_high	0.09*	0.40	0.21
	high_low	0.91	0.43	2.08
	med_low	0.08*	0.17	0.45



For the perception on parents' households as a main source we could notice a strong relation between family income and the frequency of appealing to this source, strongly related of the two cities. In Bucharest the odds are as low as ten times ($OR=0.09$) or five times ($OR=0.21$) of the medium income group compared to the high income to use these households as main or secondary sources than to ignore them at all. Such extreme differences are also in the comparison of the medium to the low income group with a value $OR=0.08$ concerning the perception of these house as main versus no source at all. This shows that the medium income group does not enjoy the access to personal households as the other two groups. For Ploiesti the situation changes with odds three to four times higher ($OR_{10}=3.25$ & $OR_{20}=3.97$) for the medium income group in comparison to the high income group for using such households as secondary or main source than not using them at all. The odds of the medium income are lower than the ones for low income group in the previous sense ($OR_{20}=0.5$ & $OR_{21}=0.7$) showing that the last group appeal mostly to this source. The odds ratios for comparing the high to low income group show therefore such low values $OR_{20}=0.1$ or $OR_{10}=0.24$

bringing us to the conclusion that the high income families in Ploiesti appeal the least to such sources.

It is possible that the need for a 'Western image' in an idealized sense induces a neglect at the declarative level for the perception of this source of food. The subjects from Bucharest in the middle income category might neglect this type of source which could be taken as a reminder of their rural origin (if they belong to the first or second urban generation); it is also possible that part of this group moved in Bucharest during the Communist period cutting the ties with the rural life.

For the subjects in Ploiesti (a more provincial urban environment) it can be a mark for the status image; so that the subjects with lower income use this source more often meanwhile for the subjects in the higher income category the tendency to dissociate from the rural image might be decisive.

THE ANALYSIS ON MOTHER'S EDUCATION CATEGORIES

Parents' education level was also considered in our study. The majority of the parents from Bucharest (80%) fall into the medium category up to a high school degree meanwhile the ones from Ploiesti show a high percentage (61%) of parents with college education (high level)(table8). This fact is reflected also in the family income distribution where the last mentioned category place themselves more frequently in the higher income group while the other in the low and medium income category (Table 9). In figure 3 we can also notice the extreme values for Pearson residuals in the college group (stud_sup) and high income category in Ploiesti and for the low income group in Bucharest which confirms the disproportion in these categories.

The chi-square test shows a highly significant association (a p-values <0.001) in both cases of cross tabulating the level of education with place of origin and income levels as well as a linearity tendency that are suggested by the Gamma indices (with the values 0.7 and 0.44).

Taking into consideration the relation between income and parents' education we were further interested in looking at the way this relation is reflected in the perception on the food sources. Similar to the previous analyses the option parents' household as source of food appears to be statistically significant.

One might notice that in both cities, the high school group and respectively the low and medium income category are more dependent on household products than the college group with the higher difference in Ploiesti (three times higher 15% versus 45% for the perception as main source (Table 10). The chi-square test for this option provided a statistic of 16.5 and a p-value of 0.0003 and a Gamma index of 0.5 indicating also a tendency towards linearity. The largest deviations between observed and expected values as shown by Pearson residuals appeared for the options "no source" in Ploiesti and "main source" in Bucharest, in opposite directions for the two levels of education. Controlling of place of origin we found a significant statistical association only in Ploiesti (a p-value smaller than 0.0001).

Table 8

Mothers' level of education in the two cities (in %)

	High School level	College level
Bucharest	80.58	19.42
Ploiesti	39.21	60.78

Table 9

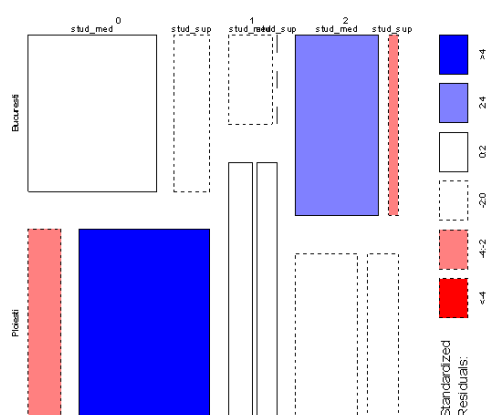
The relation between income and level of education (in%)

		low	med	high
Bucharest	High_school	70	20	10
	row/col%	88.89	76.19	53.33
	College	36.84	26.32	36.84
Ploiesti	High_school	50	42.5	7.5
	row/col%	66.67	44.74	8.82
	College	16.13	33.87	50
	row/col%	33.33	55.26	91.18

Table 10

Answers for the option parents' households (in %)

		Main source	Secondary source	No source
Bucharest	High school level	38.57	10	51.43
	College level	23.08	0	76.92
Ploiesti	High school level	45	27.5	27.5
	College level	14.52	14.52	70.97



In the odds ratios table shown below (Table 11) one can notice a large value for the category ‘no source’ and “main source” for parents’ household option. This shows us that the parents with high school education have a 4 times higher odds (OR₂₀=4.31) in the pooled sample for both cities or even 8 times higher in Ploiesti than the ones from college group to appeal to parents’ households as main sources of food than to ignore them at all as a source; and twice as high (OR₁₀=2.30) as secondary source. In the Ploiesti sample the situation becomes more extreme with up to 8 times higher odds for the first sub-table mentioned and almost 5 times for the second.

Table 11

Odds ratio of the two categories of studies for parents’ household and any household (only the first shows statistical significance for association)

Education level vs type of source	OR ₂₀	OR ₂₁	OR ₁₀
Parents’ household both cities	4.31*	1.88	2.30
Parents’ households only Ploiesti	8.00*	1.64	4.89*

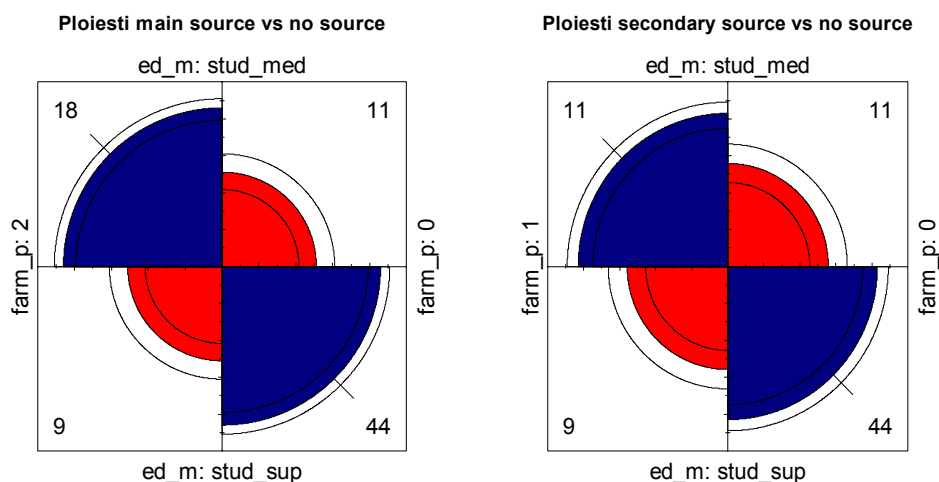


Figure 8. Fourfold plots in Ploiesti sample for the option parents’ households.

A possible psychological explanation of the mentioning the rural food sources (parental households) can reside in the fact that higher education provides also a different perspective on its own status. This tends to overlook the undesirable aspects of the rural origin but retains the positive ones as for the example the one regarding health.

CONCLUSIONS

The supermarket is perceived as a main source of food by the majority of the interviewed subjects independent of the urbanization degree of the city of gender, family income or parents' educational level. The options regarding farmers' market and households in general are also seen as sources of food by a consistent percentage in our samples. This fact reveals a positive perception of the adolescents regarding the appeal to autochthonous food (straight from farmers' market or households) that are not affected by industrialized processes and are lower in cost than the imported products and therefore more accessible to a larger part of population.

For the supply coming from parents' households, unlike all the other options, our statistical analysis identified significant measures of differentiation between categories induced by family income, mother's education or place of origin. It appears therefore that a real differentiation effect involves esp. this type of source. We might also notice a tendency of differentiation on gender for this option, which might be explained through the fact that girls are more inclined to preserve the tradition due to their neurobiological nature but also due to the cultural practices involving childcare.

The possibility to have a family-owned source of food apart from its contribution to the strengthening of the family ties represents in the actual context of economic transition a survival means for the population in the low income group in urban areas and a way of subsistence for the rural population. In the present social and economic context of our country home grown and organic food consumption is rather a consequence of economic survival than of the awareness of the benefits of this sort of nutrition.

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MEANINGS AS CULTURALLY BOUND OBJECTS. A POSSIBLE POSITION

ILINCA DAMIAN¹

This paper brings some theoretical observations towards the research of art objects in the domain of sociocultural anthropology. In this paper I am proposing a new approach to understanding the act of giving meanings to art objects and the methodological possibilities that can be drawn from this approach. To justify my approach I use mainly the research of Renato Rosaldo and Clifford Geertz. This critique builds the basis for a system of relations between meanings and the art object generating them, briefly presented as the Satellite Syndrome, where I consider the meanings as being satellites of the art object, able to translate one or several interrelated elements constituting the artwork. A methodological quest starting from this point will guide the researcher into tracing the elements that lead to the art object discussed. By concluding that an absolutist meaning is impossible to reach, this paper leads to a type of analytic research capable of tracing elements of abstraction and inconsistencies that may lead to an Idea able to translate and reorganize itself in order to be observed and looked upon by those interested.

Key-words: sociocultural anthropology, crisis in anthropology, art objects, meaning, innocent observer.

INTRODUCTION

This paper aims to a sociocultural analysis of the act of giving meaning to art objects, focusing on its limits and possibilities. I consider meanings as mental objects related to an art object by choice, bearing an intentional and referential character. The problem of anthropologists who cannot escape their cultural background finds a peaceful solution by accepting their inability of perceiving the alien cultural models and accepting that their given meaning will never be complete or accurate, but bearing the same degree of strangeness to the culture depicted, as the culture depicted is strange to the anthropologist. The resulted meaning should not be blamed for being a mixture of translated observations from

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a culturally-fixed standpoint. Its aims and possibilities should be analysed with more attention, focusing on tracing the recurrent or inconsistent observations back to the object of interest.

The article is structured in two main parts, each one having its subdivisions. The first part gives an insight of the activity of giving meaning to different cultural and artistic aspects in the anthropological domain. Here, I am trying to establish the grounds of the said activity by discussing also gestures not frequently related to meaning, such as acts of adornment and destruction or collection making and conservation studies. This extended view of what we usually call “giving meaning” helps us develop the idea of meaning as a sociocultural act, related to the object of interest just as much as it is related to the background of the viewer. The result of the practice, the meaning is a social act, destined for reception by the other observers, and projects an understanding of the object from a specific cultural position. The second part focuses on the limitations of meanings as culturally-dependent objects, and the possibilities of producing other meanings related to them. In this part I focus on the relationship between the art object and the meaning-object, their limits and subsequent possibilities.

My main influences in developing this paper are the studies of anthropologists such as Renato Rosaldo and Clifford Geertz. The critique to the observer’s approach as developed in Renato Rosaldo’s 1989 book “Culture and Truth” where he analyses the anthropologist’s approach to cultures, their fails and fears while developing the idea of a work centred more on critique and less on description and definition is a centrepiece to my analysis of the process of giving meaning. Clifford Geertz’s 1976 article “Art as a Cultural System” directs my subject towards the problem of meaning given to works of art and the inability to approach the profound formations encompassed by art objects.

THE MAKING OF MEANING – OBSERVATIONS ON A METHOD

We can describe culture as the complex of definitions, descriptions and practices related to both spiritual and material world, existing within a group of people and being transmitted through learning from generation to generation, during certain time-space coordinates. Cultures are difficult to understand, describe and define as they are marked by changes or disappearance. For the historical cultures, already disappeared, to which observers have access only by artefacts, the understanding becomes even more difficult, developing under an abductive reasoning (going from observation to a hypothesis that accounts for the observation). For traditional cultures to which the observer can have direct contact with, the task of describing may seem easier because of the direct interaction with the specific medium. When describing a culture, artefacts and artistic practices are the material proof of the specific cultural perceptions, observed and noted as

specific by comparison to a different culture. The difficult task of defining the artistic practice within anthropological research is given by the universal presence of it within different cultures. My approach focuses on art objects from historic or traditional societies and their interpretation within modern societies. My main concern is how the ambiguity in defining and studying the artistic practice results in a various amount of meanings given by anthropologists and also by art historians, theorists and critics. All the observers have questions concerning the same phenomenon, which are answered by an item seen as belonging to it, yet they end up giving different accounts of the various aspects the item might have had in the said culture.

Since the subject of this paper is an analysis of meanings given to art objects by observers, I consider useful to bring a definition to the art object and a description of the observer and his/her attributes.

Art objects and observers

My approach to the art object is based on the works of philosopher Nelson Goodman and art historian Whitney Davis, who both share a Peircean concept towards the subject. In the 1986 article *The Origins of Image Making*, Whitney Davis develops a definition of the pictorial image as an intentional act, developed late in the human evolution process as a part of a specialized process of reduction and decomposition of the human vision. Humans develop the ability to use non-representational marks, such as lines or blots of colour to compose a pictorial image that refers to an object, because they can mentally decompose the reference object in parts that can be symbolised using non-representational tools, such as lines and colours. Representation becomes a tool for the eye in abstracting, simplifying and understanding the world. The main quality of a pictorial representation is being partially dependent upon perceptual identities with the subject but partially detached, non-identical (Davis 1986: 200). This gives the artwork the possibility of becoming an object itself, tied to the model by denotation. The author of an art object makes his/her choices of elements and representational tools within a cultural context, his/her work being dedicated to his/her contemporaries raised in the same background. The art object is, thus, understood at its best by the people who share the same sociocultural background. On this aspect, Clifford Geertz brings an important contribution in the article "Art as a Cultural System" (1976) where he notices and analyses the deep ties of the art object in the social context, and also, the lack of interest for the social context shown by semiotic analysis. A pictorial representation is a visual impression of a certain moment in time and space coordinates and it denotes certain information in the cultural sphere. If one agrees to put Davis' semiotic analysis in the second place and focus mainly on the intellectual ability of individuals to deconstruct

observed external objects into parts that are subsequently recomposed by non-representational elements with no direct relation to the external object, one can notice the act of decomposition deeply involved in the interpretation of the reality.

The observer is any individual facing an art object. He is defined by his interest in the art object, in understanding and presenting it. If the art object exists initially in a cultural context able to intuitively understand and relate to it, the chances are that it will keep existing and gaining attention even when its initial cultural context ceased existing or in places far from its cultural context. In this situation, the art object is observed, perceived as intriguing and alien, rather than a participating member in a social apparatus. The said art object is not a part of the reality usually perceived by the members of the cultural background. When seeing such an art object for the first time, the first step of any observer is to ask "What is this?" or "What does this mean?" The observer is defined by the quest of integrating the foreign art object into his reality, process that implies usually finding a definition and giving value, all these being strictly related to the systems of reference active in the said cultural background. To find an answer, one can intuitively ask oneself and give a personal interpretation based on his knowledge or one can ask others who are better equipped to answer. The museums' gesture of displaying information about the provenience, author and date of an art object, is made in order to give a general and intuitive response to these questions. Making sense of a representation is an act so common and so intuitive that it is usually taken for granted and remains almost unremarked by scientific approaches. Charles Peirce in "Questions on Reality" (1868, MS 248) states: "Every representation refers to an interpretant" (www.iupui.edu/~peirce/writings). Following this statement, we notice the purpose of the artwork in being observed and gaining meaning.

The act of giving meaning puts the observer in a difficult position. The history of anthropological research provides us with countless examples of given meanings that lost their value or were considered wrong from the beginning. What one thinks one knows and builds an argument by providing proofs and accurate definitions, is subject to changing and becoming obsolete in the course of time (Rosaldo 1989: 8) because of finding new pieces of information that require new interpretations or because of changes in the main theoretical approaches. At a certain point, the artwork is surrounded by a mass of given meanings, each one being different and somehow similar to the other and all gravitating and filling the space between the artwork and its viewer. I consider the process of giving meaning a phenomenon worth studying from the anthropological perspective, focusing on the relations between people, and between people and objects. The gesture of giving meaning is a sociocultural phenomenon from the moment when it is expressed and starts bearing material form (book, adornment, markings) and becomes a proof of the attitude of a certain group of people perceive the subject discussed.

The meaning-giving process gained a lot of attention and energy directed towards it in the modern Western culture, where the art object became subject of interest in domains such as sociocultural anthropology, philosophy of art, aesthetics or art history. We are now close to one hundred years of anthropological research (if we consider Franz Boas' work as a reference point) that implies relativism and empirical evidence as starting points and which has developed an interest in the artistic practices as human activities. Just as well there is slightly more than a century of art history and critique of the artwork as modern disciplines. The last hundred years provided us with an immense amount of theories and approaches of a finite number of art objects. Just as well, the last century provided us with a classification and valorisation of the said artworks: what should be seen as important and grand and what not. In this situation, I consider important to focus on the social implications of the amount of interpretative information that was created.

The lack of innocent observers

When the statue of the Sleeping Hermaphrodite was found, in the 17th century AD, it came in the possession of cardinal Scipione Borghese and became a part of the Borghese Collection. The cardinal dedicated an entire room to it in his new Villa Borghese and commissioned to the sculptor Gian Lorenzo Bernini a marble cushion for the Sleeping Hermaphrodite to rest on (Haskel and Penny 1981: 234). Currently the statue along with its mattress is on display at the Louvre Museum in Paris and also has reconstructions of its missing left foot and erected penis. The statue of the Sleeping Hermaphrodite is one of the few representations of the mythological character Hermaphroditus, and is a Roman marble copy from the 2nd century BC, after an older (supposedly) bronze representation attributed to Polykles (Lexicon Iconographicum Mythologiae Classicae 1990: 276). Besides the Borghese Hermaphrodite there are other five relatively complete Roman replicas of the same representation, a fact that gave room for the supposition that this was a popular theme in the cultural context of the 2nd or 1st centuries BC. The Hermaphroditus is a mythological personage possessing both male and female sexual features that appears late in the Greek and Roman mythology. Most of the sources and representations are being attributed to Roman or Hellenistic world and the cult activities related to it are inconsistent (LIMC 1990: 276).

The situation roughly sketched above presents the fact that a rare representation from the Greco-Roman world, found approximatively nineteen centuries after its creation, was reinterpreted according to the social apparatus of the then-present time: a room, a mattress. Later, it was reinterpreted as a museum object, by being restored and presented along with the interpretation from the 17th century (the mattress). Even if the Borghese Hermaphrodite had its original

sculpted draping to sleep on, it was decided for it to have a marble mattress. The owner was amazed by the statue's beauty and he considered its beauty is worth an endorsement, a physical act of appreciation: a baroque style marble mattress, specially crafted by one of the most appreciated artists of the time. Although the marble mattress has nothing in common with the Hermaphroditus statue, it was kept for display in the museum exhibition because of its historical significance.

The mattress marks the clash of two cultural moments in history and a product from a different cultural background is brought into attention with the interpretation given by its finders. A mattress for a statue of a minor Greek – Roman deity, which had a cult and maybe a storyline accompanying the sleeping pose, is as useless as it is inopportune. Clifford Geertz's observation on the cultural background of an art object being not even in the aesthetic analyser's line of sight (Geertz 1976: 1475) gives an intriguing insight of the situation.

The analyser proceeds to give his/her own interpretation of the art object based roughly on semiotic data and his own scale of values. One can interpret the signs available in one's sight, as one can never have access to a complete, final and unanimous meaning for any human product. The relativist theory considers that there is no final and unanimous meaning – a truth – of the object, but there are its external traits, and all the given meanings are equally correct because they are the best ideas of the object at a certain moment (The Cambridge Dictionary of Philosophy 1995: 690). The observer can never fully escape his cultural background, nor does he want to, according to Renato Rosaldo's analysis on the ethnographer's research. Rosaldo concludes that the scientist tries to behave as an objective viewer, trying to develop the "emotional, cognitive and moral equivalent of a blank slate" but in the meantime translates the seen behaviour into the cultural language of the culture he belongs in, his research becoming dependent on the interplay of culture and power (Rosaldo 1989: 193). He is never as objective as he wants to be and he fears any subjectivity and any interference with the subject depicted. The fear of "going native" is real for the anthropologist who thinks that by becoming closer to the subject he won't be able to give an accurate description and definition for his initial native culture (Rosaldo 1989: 180).

The observer, may he be anthropologist, art historian or critic, sociologist or philosopher, wants to provide insight of the subject. But he provides recurrences, patterns, styles, data and proofs on a scientific base and his personal thesis recorded from a supposed-to-be objective analysis and developed under the regulations of his cultural background. The result is something that reaches the subject but not really, close enough to provide a visible resemblance and utility but still far enough so that the next scientist will see apparent missed points and errors and give his personal interpretation of the subject. There is no blank slate, no innocent observer, but there are incomplete translations.

The satellite syndrome

Returning to the above mentioned relativist claims, we see that there are no universal truths and no intrinsic characteristics to the world, but there are ways of interpretation and their result, meanings. So, one ends up with a series of given meanings tied to an object with a claim that there is nothing intrinsic. One can notice something rather strange about the given situation: a mass of scientists and an even greater mass of meanings are attracted to something that has nothing intrinsic, has no deeper meaning, just external aspects that require a great amount of attention. "There is a certain attraction", one will observe, but to what?

Let's consider the artwork a focal point that attracts people who view it and acts like an agent bearing a certain set of information, behaviour and even emotional reactions. It attracts not only the people from the cultural background it was designed for, but everyone who has the possibility of direct contact with it (or, in the modern era, even when mediated by technology). As many 20th century anthropologists realized along with the crisis in anthropology (Rosaldo 1989: 190), the observer trained to have no personal interference with his subject, failed to do so along with failing to give a full and accurate insight on his subject of interest. He is followed in his quest by others: his contemporaries in the same or similar domain and the future generations who will feel that the meaning given still doesn't encompass their approach to the object. The future generations will feel this way partially because they have access to new pieces of information, they have different questions unanswered yet, or they are guided by other sociological and historical theses or even ideological background, but partially because they have a strong opinion that the initial observer didn't tell "the whole story". This phenomenon provides a (possible) never-ending enumeration of meanings that gravitate all around the object and can interfere with the viewers interested in the art object. We will call this phenomenon the Satellite Effect.

A satellite is defined as an artificial object intentionally placed into orbit. Having its own mass, it is constantly attracted by the planet/star on whose orbit was placed, due to the gravitational force exercised by the planet/star. Just like the satellite, the meaning is an intentional act, created and placed in relation with the item discussed in order to give a comprehension of it. Its launch is created through being observed, acknowledged, cited, and gaining mass in the eyes of other scientists who, as well, agree that there is a gravitational orbit, more or less consciously. The orbit is generated by the agency of the artwork each time the artwork is being observed. There are possible satellites never brought into attention, by not being spoken about. But we are taking into consideration now the meaning given by an observer and approved by the others, meaning that orbits around the artwork in plain equality and righteousness. As time passes, the artwork gains more or less satellites depending on the influence it generates in a specific social context. The amount of satellites can be considered a quantitative

appreciation of the agency a certain artwork generates and also a criterion when the art object is reflected upon in comparison with other art object, describing its value.

There are also material satellites. The material satellites are the amount of physical reactions people have when put in direct contact with art objects: a tentative of destruction that left a visible marking, the act of restoring, repainting and reconstruction, different or unrelated objects added to the artwork (for example adornments of certain religious artefacts or the mattress from the situation presented above). These material satellites can generate their own satellites. For example, the intentional mark left on an artwork generates new theories about the reception of the said artwork in a social context that dismisses the religious or social manifestation in which the artwork initially belonged. A different set of satellites are the replicas and forgeries of the artwork. The initial artwork exists just as well without them, but their existence reflects the value the artwork for a certain group, and an innocent attempt to get away from the autographic character (Goodman 1968: 112) of an art object. Satellites can be generated by poets and writers who compose inspired by the artwork and by the stories and mystifications told about it (Steward 2007: 168). Last but not least the simple act of preserving an artwork that has no relation to the owner's background is a proof of agency and generates continuous meanings for the owner, strong enough to make him/her preserve the artwork (for example the statue of the Hermaphrodite, a Greco-Roman deity in the house of an important Christian personality, the Catholic Cardinal). Just as well, museums and art collections are the most visible and yet unnoticed material satellites, being physical spaces created just for the preservation and display of the artworks.

The main characteristics of the satellites are their distance to the object and observation of external characteristics, while being attracted and guided by the agency the object generates. They end up functioning like a lens, helping new observers notice the art object from a fixed point. They may be apparently different, by being scientific facts, theories, mystic accounts, literary motifs, vandal acts, aesthetic tributes (adornments), replicas, forgeries and even buildings. They are equal in significance because their creators report to different cultural and historical backgrounds. The meanings become mental objects characterized by intentionality and acting as social agents, which can guide the behaviour of the viewers. The relativist position characterizes the presence of the satellites and the external relation with the artwork, but not the attraction to it. Maybe the most important observation of the relativist approach is the fact that the observers give the best interpretation they are able to, taking into account their background. I emphasise the cultural background as it is responsible to guiding our speech and reflection towards subjects alien to our background, guiding us as observers towards a translation and adaptation to the background rather to an immersion in the alien cultural medium. Given these, the question that lingers is why do we feel the need of adapting and translating the alien object? The relativist approach makes

the artwork seem like an empty shell that is re-created with each satellite. But how can an empty shell provide the glitch necessary for directing a great amount of energy into building a satellite?

The cultural significance of the artwork is “always a local matter” says Clifford Geertz (1976: 1498) and from his anthropological point of view, art must be analysed only in regard to its cultural habitat, seen as a “collective formation” which is “as wide as social existence and as deep”. By proposing a cultural-enclosed framework for the interpretation of an artwork Geertz states that there is a formation tied in the social existence, unreachable for those not raised in that cultural system, not acculturate, for those who don’t have the possibility to interact and interfere with the culture or for those who are simply alien to the said culture. The art object is seen as “designed to demonstrate that ideas are visible”, but two questions arise: What ideas? And visible to whom? In the same line of thought, Alfred Gell in his 1998 *Art and Agency*, constructs an anthropological theory of art (as himself names it), where he emphasises on the reception of the artwork and the role of the artwork as a bearer of beliefs and meanings enclosed in a cultural framework but reachable by the alien viewers. Both anthropologists focus on the cultural and social context, its role and meaning in the presence of an artwork. When Geertz assumes that the artwork has a deep meaning by being the embodiment of an idea, he also notices the abstract character of Nelson Goodman (among others) semiotic aesthetics. The Peircean theory of signs mutated the attention of aestheticians and philosophers of art to a visual function and a less transcendental, sacred or culturally-dependent act.

THE GIVEN MEANINGS AND THEIR CONTRIBUTION – A REFLECTION TOWARDS THE RESULTS

A preliminary definition of the meanings given to artworks aims at encompassing all the gestures, physical and intellectual, into one gravitational system whose existence is marked by agency generated by the artwork. Those interested in meeting the artwork are more or less forced to filter the existing meanings, which will subsequently influence their personal interpretation. Even if unaware of the existing interpretations, the observers are still guided by their cultural medium when interpreting the artwork. The given meaning is a mental object embodied in different material forms – book, adornment, gallery, museum, copy, forgery and so on. Thus, the meaning is being made, in a similar way the image is being made. The given meaning becomes an object partially dependent of the artwork, allowing it to orbit. Its dependence is given by the intentional character in relation to a certain art object while its detachment is provided by the different background of scientist, which allows him/her to have a personal contribution related more to the background and less to the features of the object.

The dilemma of the artwork unable to encompass all the features of the model translates to the meaning. We are facing a meaning unable to encompass all the features of the artwork because of simplifications, categorisations and judgements of value. All these focus on the external features that can be translated, decomposed and reorganised into meanings, but don't focus on reaching profound formation enclosed in the artwork, that generates the need for a meaning in the first place.

If we speak about ideas being made visible (Geertz 1976: 1497), we should take into account Plato's view on ideas and artistic representations, seen as *mimesis*. Plato argues that the art object is the most distant embodiment of the Idea (Plato, Republic: 596-599). Taking into consideration the above approach to meaning given to an art object, we might notice that it is even more distant from the Idea the art object depicts. The satellite-meaning is a cultural adaptation of the translatable features of the Idea. In this context, the viewer interested in the art object ends up interacting with the satellites, but he is more involved in the scientists' own dilemmas, translations and sociocultural background than in the object's reference to the Idea. In this case, are the satellites more harmful for providing a lens that limits and distorts the objective features of the art object? But even when left without the satellites, just facing an art object without any endorsements, information and judgements of value, the viewer's impulse is to create such satellites in the paradigms provided by his cultural background. In this case, it is safer to interact with the meaning given by an observer aware of his limitations than to interact with one's own system of values provided within the cultural background and tied at an almost unconscious level. If one chooses to follow the observer's line of thought, one can find traces related to the Idea of the object, after one takes note of the cultural markings left by the observer. In this case one can trace an Idea that bears a need of representing and transforms itself into an object each time it is being observed, which, otherwise, can never be fully seen or understood.

The possibilities given by the concept of meanings as mental objects are becoming more appealing when we face the premise of recurrences and patterns. Each meaning, although noting differently and translating an aspect, has a series of observations common to other meanings. Tracing this web of recurrences we notice an illustrative pattern, often judged as values, that raises the importance of the object in our view. But what if we trace the recurrences and patterns not to our appreciation but towards the profound formation that generates the entire process of giving meaning? We, as observers, are used to think that what we process is strictly related and directed towards us. But what if we change the direction towards the object that required the meaning in the first place? Returning to Plato we may observe that he uses to describe art as *mimesis* and as the third in distance to the Idea, for it is a human, subjective representation of a natural representation

of the Idea. But still, what we have to notice is that the Idea required representation, embodiment, an observation made also by Geertz. So, when observing the art object one catches a glimpse of that Idea. Yes, the glimpse is weak by being embodied already in two forms unable to fully describe it, one more than another. But it is strong enough to raise a search for it, using one's tools given by one's sociocultural values and abstractions.

About abstraction and inconsistencies, Paul Feyerabend has an interesting approach. He focuses on abstraction and ambiguity as essential to change and he notes that the Western culture has its important role in simplifying the world (Feyerabend 1999: 5). His critique is useful to our quest: he notices the incapacity of accepting phenomena as they are and the inference with them by experiment. We notice the same problem with the anthropologist research. The cultural background gives a set of values and uses the mind's capacity of translation and abstraction to simplify, notice and ignore features yet unknown. One's mind interprets following criteria already accepted. This is why the anthropologist, by losing his/her cultural background by choice, is on the edge of immersing into the cultural background of the subjects observed. While immersing in the new medium, the anthropologist might have access to new pieces of information he otherwise could not have observed. But, once immersed he cannot translate them to his initial peers because of the lack of a synonym in his original culture. Returning to our problem, we might see how the incomprehensible of the Idea can exist. Also, we might see how certain observers can notice more features than others, by initially being part of a culture that enables their mind to find translation. Returning to the satellites, we see that they are linked to the art object by their incomplete translation of a feature of the Idea, while they are differentiated by their unique points of view of the art object and different features translated.

CONCLUSION

Meaning is a syncretic construction marked by reference and intentionality. It encompasses both reference to its author and to the object it is directed towards, posing in a state of apparent balance. Reference towards the author is made by the cultural markings left by him/her in the construction and argumentation of the meaning and has an indirect character, while the reference towards the object is direct, made explicit by the author and is the reason for the meaning's existence. The anthropological quest for a neutral observer who can give an accurate account of a culture observed failed to find a viable candidate because all the observers end up translating the object in the framework of their native culture, observing things translatable and ignoring what they don't understand. This process bears a degree

of simplification and encapsulates the cultural phenomenon in a “not-moving” phase, while by the mere interaction with it, the culture shifted towards new approaches and changes. A meaning that is neutral and absolutist is impossible due to the observer’s view of the outside world in a set of variables guided by the cultural framework he/she emerged from, variables that guide observer’s initial (limited) questions. Each new observer hopes for completion and keeps searching for new approaches, new questions and new theories. The Western observer’s perpetual reach for the neutral meaning able to encompass all the aspects of the object is an interesting human quest.

What remains as a constant feature, fuelling the quest of “giving meaning”, is the intuitive question “What is this?” and the gesture directed towards the artwork observed. From this gesture we can trace a slight shadow of a materialised, embodied Idea that shifts form and translates itself to different cultures and mediums, linking the art object with the satellites. The last century, marked by a scientific approach to art objects gave us a considerable amount of such meanings and a culture directed towards theorisation of every aspect of human behaviour and cultural development, resulting in an abundant quantity of such satellites. If we choose to consider each satellite as bearing a diluted glimpse of an incomprehensible Idea, we can consider there can exist a deeply conserved element that leads to the Idea. If we choose to consider meanings as directed towards us, we see they are incomplete and they fail to respond accurately to our personal “What is this?”

By accepting that a work of art will never have an absolutist meaning but just as many meanings as there are observers, we intergrate it in the social world recognising its power of creating interactions and movements within people in a continuous search for meaning. But, in the same time, we are able to focus on the features that govern the creation of meanings, interactions and gestures and trace them towards a certain point of translation and understanding. From accepting the lack of innocent observers, absolute meanings and the limitations to understanding we might be able to enlarge our possibilities of knowledge.

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OCCUPY THE CYBERSPACE.
THE SOPHISTICATION OF PROTEST MOVEMENTS
THROUGH VIRTUAL COMMUNITIES' EFFORT

GABRIEL STOICIU¹

Nowadays, except some sporadic anti-globalization protests, no significant social cause seems raising a powerful response, even if a major economic crisis strikes almost the entire world. These facts made me prepare and carry out a fieldwork in France, aiming to reveal if the youth still has the necessary attitude and energy to start and support a mass protest and, in the same time, what cause would lead to such manifestation. I chose University of Nanterre (the place of initiation of '68 movements in Paris) to conduct my research as participant observer during my 2008-2009 postdoctoral fellowship.

The main object of this paper is to offer an original image of youth involvement in public debates and especially students' participation to "civic engagement". The time factor – what happened in 1968 and what is happening now – is also very relevant for this research because of inter-generational debate. This diachronic comparison also leads to discussion about increasing number and variety of products in media technology and, accordingly, its increased influence on public attitudes. Participant observation and interviews provided important data about the public events of student groups in Paris. I also used visual techniques, which enriched the information.

Key-words: cyberspace, social movements, virtual communities, Parisian academia.

INTRODUCTION

Claude Lévi-Strauss has expressed in 1983 (*Le regard éloigné*) the concern that the development of media has launched a process of cultural homogenization in the world. A while ago, television was accused of converting people from actors into spectators.

The 60s were the decade of "media boom", but also the time of emancipation of the role of youth in society. The continuous media development from national TV channels to international satellite networks has enabled people to see live world news through images and sound, which aroused spontaneous acts of consciousness about world realities. Therefore, students in Helsinki, for example, could not remain passive to the images of the Soviet invasion of Prague in 1968. A similar process made students in Germany be solidar with those in United States and rose

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against the Vietnam War. The development of media to the satellite TV era of the 80s (once spread in the countries of Eastern Europe) is also regarded as facilitator for the anticommunist movements of 1989.

Although the geographic and political frontiers still divide the people of the world, the expanding of information and communication technologies seem to render these borders almost useless. The interaction of different cultures is easier than ever with the advent of the Internet and other “new technologies of information and communication”. Nevertheless, could this be enough to strengthen understanding and empathy? We cannot say in good faith that today the Internet generates mainly social understanding and tolerance instead of stimulating the empowerment of extremists groups.

Nowadays, the Internet fulfills the function of source of entertainment and information in real time, and can be characterized as the “genie in the lamp”. Facebook and Twitter, and even the universities’ forums, represent places of virtual gathering and media of preparing and promoting different actions as manifestation of social engagement of youth. This was the case of a marathon movement in 2009 in France against the “law of university reform” (aka LRU Pécresse).

This diachronic comparison also leads to discussion about increasing number and variety of products in media technology – the advent of personal computers / laptops, the Internet (and different software communication) mobile phones etc. – and, accordingly, its increased influence on public attitudes, to prove how online forums, socialising sites and blogs become the main place of gathering for youth in present time and stimulate their creativity in promoting new forms of protest (as die-in or brain-drain).

Western civilization, in its modern evolution, developed a democratic society based on market economy. This part of Europe has been marked throughout the second half of the 20th century by social and political convulsions. General strikes, civil disobedience, mass protests have been more frequent in the West, but not as bloody as the movements in Eastern Europe.

1968 was, perhaps, the most intense year from this point of view, with several social movements around the world. Students in the “free world” demanded greater attendance for civil rights. On the East side of the “iron curtain”, the youth of Prague appealed for self-determination from the Soviet intrusion in Czechoslovakia’s political life – a fact which inspired Romanian authorities to show a very open disobedience against the decision of the Warsaw Pact to retaliate against Czechoslovakia.

Presumably, when people discover that the state no longer meets their needs with socio-economic policies, or may not act on their behalf, some people choose to gather at the community level, not only to regain a degree of political control, but also to assert their own identity. For example, some individuals adopt joint actions to fight against consumer trends potentially induced by multinationals. Other support policies and actions against the homogenization of media culture. Still, what lacks is the result of a “critical mass” of people in order to generate social change.

Nowadays, except some sporadic anti-globalization protests, no significant social cause seems raising a powerful response, even if a major economic crisis strikes almost the entire world.

These facts made me prepare and carry out a fieldwork in France, aiming to reveal if the youth still has the necessary attitude and energy to start and support a mass protest and, in the same time, what cause would lead to such manifestation. I chose University of Nanterre (the place of initiation of '68 movements in Paris) to conduct my research as participant observer during my 2008-2009 postdoctoral fellowship. Participant observation and interviews provided important data about the public events of student groups in Paris. In addition to classic methods, I employed the visual techniques, which enriched the information and might induce a direct empathic state between the viewer and the author.

PREMISES

This article aims to provide an original image of youth involvement in public debates and especially students' participation to "civic engagement". The time factor – what happened in 1968 and what is happening now – is also very relevant for this research because of inter-generational debate. To better illustrate the different aspects of a subject like this, a qualitative approach seemed to be the most appropriate path. Participant observation would provide important data about the public events of student groups from universities in Paris. Because of age proximity, I made a direct approach especially for master's students (who, in addition, are generally more integrated into student life).

Through semi-structured individual and group interviews I managed to gather some pertinent opinions on the impact of "new technologies" on social engagement and also to obtain some important reflections on historical events of 1968 (on the latter subject I also interviewed some participants to those events – now members of academic staff). Group interviews have the advantage of a strong engagement in the discussions, but at the same time, they are more difficult to moderate. Individual interviews helped deepen the issues and motivations of opinions.

In addition to these traditional methods, I would also use visual techniques, which enriched the information and facilitated another output of this research – an ethnographic film. The visual ethnography has the advantage of inducing a state of empathy between the viewer and the author.

PAST AND PRESENT IN SOCIAL MOVEMENTS OF YOUNG PEOPLE INVOLVED IN PARISIAN ACADEMIA

Celebrating forty years since the protests of '68 and twenty years since the clash of communist regimes gives us suitable pretexts to ask: are there anymore

reasons to expect such mass protests in the so-called “modern societies” or we can declare for the first time in history that the youth is pleased with the establishment of the welfare state?

The “law of university reform” touches various aspects of organization of the domain of higher education and research responding to pressure the European Union’s Bologna Strategy. It is meant to lead this sector to profitability by decentralization, re-structuring, self-financing, etc. This process means the diminution of State’s input to this sector and inevitably an increase of unemployment. In this context, the academia felt the imperative to react paradoxically against the “reform”. Students joined this movement almost immediately considering this law a threat to their careers. I participated to several manifestations (which lasted since the beginning of February till late September 2009) and had the opportunity to interact with the protesters.

Most opinions expressed during the interviews I conducted with the young intellectual protesters in Paris, converged to the idea that more important of than supporting the claims of each individual, is focusing the actions towards a visible territorial conquest in the public space. To better illustrate this principle here are two famous examples from the past:

- The student uprisings of 1968 began with the occupation of the University of Nanterre and continued with the invasion of Sorbonne and Quartier Latin.

- In 1989, the Romanian revolution started with the occupation of University Square

In *The Hidden Dimension*, Edward T. Hall (1966) distinguished two categories: *personal space* and *territory*. Personal space describes the immediate space surrounding a person, while territory refers to the area which a person considers its own and defends against others. This theory on territoriality has also been applied to animal behaviors. While physical proximity cannot be achieved when people are connected virtually, perceived proximity can be attempted, and could be a crucial indicator in the effectiveness of virtual communication technologies. The mere-exposure effect which referred to the tendency of a person to support those who were usually physically closer can be extended to virtual communication also. Today, cyberspace seems to gain the primary role in responding to the need for territoriality. In some cases, to have a website or blog has become for a young person, more important than having a personal residence (either in property or rental). Increased communication leads frequently to empathy. Sharing space either physical or virtual is vital in achieving common ground, provided a frequent communication is insured.

The interviews and observations collected in the field advanced the idea that the student attitudes of today are more devoted to reflection than action. The diversity of messages and ways of expressions in public demonstrations (allegorical cars, die-in, the brain drain, the circle of the obstinate) are more reminiscent of this attitude, for they are the product of lucid creativity and not an impulsive act of rebellion.

An increased activity on social media such as Facebook and Twitter helped the initiation and further organization of the protests, though it failed to promote an authentic leader. Social media contributes significantly to the democratization of a society, but technology serves authority too. Communications can be monitored, tampered or even blocked in order to ensure better social control. It was the case in Egypt or Turkey. Selfies as well as GPS locators help in identifying participants to an event. Face-detection cameras mounted in high places or on drones also do a good identifying job.

In the last 10 years the information society is a reality in expansion. There are countless possibilities of communication and exchange of ideas, such as: community forums, blogs, social networking sites (like Facebook and Twitter), audio and video conferencing applications (like Viber and Skype), etc.

The argument that the Internet could create a significant civil society mainly depends on its ability to generate social capital in the understanding given by Robert Putnam, one that refers to “components of social organization as networks, norms and social trust facilitating mutually beneficial cooperation.” (Putnam 2000: 5)

Charles Tilly defines social movements as series of events, demonstrations and campaigns through which ordinary people address collective claims to other people. Tilly believes that social movements are characterized by three important elements (Tilly, 2004: 3):

- **Campaigns:** organized and sustained public effort that addresses collective claims to certain authorities;
- **Repertory:** use of a combination of political action forms: the creation of associations and coalitions, public meetings, solemn processions, demonstrations, petitions, statements in media, pamphlets, etc.
- **Specific Values:** representations of the concepts of justice, unity, mass and commitment.

To make a more accurate analysis of data collected through participant observation, interviews and audio-visual techniques over more than half a year of protests focused on university reform law initiated by the minister Valerie Pécresse, we chose as analytic framework, an operational model presented by Charles Dobson (2001) containing two dimensions (*social movement initiation* and *the maintenance of movement*) and several variables.

The onset of a social movement aims the ways in which the initiative group is formed and the claims and actions program. This stage involves several features. Many social movements start from a small group connected to a large network. This is sometimes a group of friends, sometimes a group of work colleagues, etc. Margaret Mead once said: “no doubt a small and dedicated group of concerned citizens can change the world.” (Lutkehaus 2008: 261). The uprising in Paris in May 1968 began with a group of students (led by Daniel Cohn-Bendit) protesting the conditions of student life at the University of Nanterre. Similarly, in 2009, young researchers and academics from the University of Paris X, Nanterre drew

with them, their colleagues in academic units of the Parisian region and then those of other French universities. Students from these centers almost immediately joined them.

New members appear, often through informal ways of interaction through already existing personal connections, and the more a person is integrated into an activist community, the more he/she will be available to take part in protest activities. Although the cause was common during mobilization actions in 2009, we could easily distinguish the different participating groups by the display of some signs of academic affiliations. In May '68, the relatively spontaneous and very intense actions, even violent at times, did not allow such branding.

The speed and extent of a movement depends on the available communication network. In general, greater number and diversity of people participating in a network gives more will to make an effort to mobilize. Activists can even use viral marketing techniques – as social movements can spread like innovations, the embrace of new ideas and behaviors by members follow cultural diffusion mechanism. It is in this way that the group "situationist" in May 1968, or the anti-Pécresse in 2009 in Paris, or the "hooligans" in April 1990 in Bucharest were formed. If in 1968 and 1990 access to high-impact media, audiovisual (located exclusively under state) was quite limited, in 2009 the Internet and private radio and TV stations have allowed a wider coverage of the protests and thus the public reaction has grown steadily over time.

A movement can quickly build within a group, when people start to see an issue that comes not from mischievous individuals, but from poor public policy. Erving Goffman used the term "frame" to refer to an interpretative scheme used by people to simplify and make sense of life experiences. As a framework for mobilizing becomes increasingly shared, collective action gets increasing chances. In particular, the living conditions of students in 1968 and the 2009 law for rights and responsibilities in universities were identified as targets for the claims of young intellectuals in Paris.

Frame extension occurs when a social movement is seeking to include interests and points of view that are very important for potential adherents. In fact, the movement seeks to broaden its adherent's basin by projecting objectives and activities as congruent with the values and interests of potential adherents. In 1968, the disclosure of still images and videos of the violent crackdown on young people on the streets of Paris led to a national solidarity with the claims of Sorbonne Square, culminating in a general strike that blocked the French economy for a few days and led to government's resignation. In 2009 students joined the academics' protest immediately, realizing that their professional future was at stake also.

Informal groups of friends, ad-hoc committees or broader activist associations are not sufficient to develop or maintain a movement. This requires organization and movement organizers. Even a spontaneous uprising like the one in May 1968 brought forward some leaders and found resources to promote itself:

there were groups which provided ammunition against “uniforms” from paving stones, others producing placards, others procuring food, others composing press releases, etc. In 2009, the marathon rallies over six months had less spontaneity, but could get a much better organization: a plus in creativity in various forms of protest and an impressive dominance of audiovisual and online media.

Sometimes the organization faces alienation tendencies within the movement – the presence of extremist groups. In order to secure their place, moderates must denounce the actions of their extremist fellows as irresponsible and counterproductive. Che Guevara, Mao Tze-Dong, Trotsky were the most significant names promoted by extremist wings in both movements: 1968 and 2009. Without resorting to violence, protester leaders took care then and now to separate themselves from these trends.

The universities often serve as incubators for progressive movements. But many movements do not go further. They are often abandoned by students who once graduated, enter environments far from the ‘old causes’. Unlike the revolt of 1968 (when teachers joined students only by individual initiatives) in 2009 protests showed continuity and solidarity between students and teaching staff. A law such as the LRU Pécresse that touches both the present and future employees in academia could not leave indifferent those who after completion of the degree program have been directly affected.

Most people acquire information and orientation in the world from an impersonal media, which can induce opinions for or against a social movement. This largely ignored fact in 1968 was well understood by the participants by 2009 protesters, thus seeking to be more present in the audio-visual information channels or online.

To succeed, a movement must generate empathy from the public and continue to be seen as legitimate and effective by its members. This means a struggle with movement opponents and initiating events and themes in a way that supports the movement. In the battle for favorable public opinion, various communication technologies are used to promote the message. Unlike the movements forty years ago today, the IT&C (phones, laptops, tables) is used to recruit potential members to reconnect with inactive members, and generate action alerts and call for resources.

Social Media can allow firms to engage end-consumer contact at relatively low cost and high efficiency. This makes Social Media relevant for all kind of businesses and even for nonprofit and governmental agencies. This platform requires new ways of thinking in order to acquire large gains. Making Social Media applications mobile is adding further opportunities to expand the networking horizons. “Obviously, Mobile Social Media does not come without a price. Some would argue that while it enables the detailed following of friends half-way across the world, it can foster a society where we don’t know the names of our own next-door neighbors.” (Kaplan, Haenlein 2010: 67)

Social Media do not produce protest movements; they only allow their members to get in contact more easily. Social media allow organizers to involve like-minded people in a movement, but they do not necessarily make these people move. A revolutionary group may use the social media to promote its ideological message but also its strategy and timing. For a social media-driven protest movement to be successful, it has to translate social media membership into street action. The purpose of any protest movement is to inspire and motivate individuals to give up their domestic protection for the chaos of the streets and confrontation with authorities.

If the right conditions exist a revolution can occur – the climate must be charged with problems like inflation, unemployment, corruption and oppression, and the population must be motivated to mobilize. The convenience and partial anonymity of social media can decrease the motivation of a leader to get outside and make things happen. The problem with social media is that they subvert the leadership of a movement while opening it to a broader membership. While the effectiveness of the action depends on the quality of a movement's leadership, a dependence on social media can actually prevent good leadership from developing.

We cannot imagine anymore a youth protest leader without media savvy. People skills and charisma are nowadays measured in “likes” and “followers”. Nevertheless, in order to succeed, a movement still has to face the “street challenge”. Authorities are truly compliant only to those able to bring mass pressure in the “agora”. A movement which only manifests online, even with a wide coverage, will eventually defuse, while a street movement even with its electronic communications networks cut-off, will maintain or even expand.

Shutting down the Internet did not reduce the numbers of Egyptian protesters in the streets. In fact, the protests only grew bigger as websites were shut down and the Internet was turned off.

In coping with a social movement, governments tend to adopt nowadays various types of ‘bribing’ techniques with movements’ leaders. This may take the form of hiring them on various public functions. It can also take the form of what is called “symbolic reassurance” that governments set up special hearings, committees or agencies to address specific problems or complaints. It is a lesson learned by French authorities: after the mistakes of 1968, negotiations taking place of violent repression – which occurs only in extreme cases.

CONCLUSIONS

The Internet is a major source of entertainment and information in real time. Beyond being just a communication tool, cyber-space is increasingly becoming a place of meeting. The interaction between different cultures is, more than ever, facilitated with its development. We have seen *in vivo* how online forums of Parisian universities and social media become virtual places of meeting, training

and promotion of various actions of young people social commitment. This was the case in France marathon movement against the “university reform law” (aka Pécresse LRU).

Intense exchange of messages in cyberspace are evidence of this desire to seize territory (the flow of information generated by the online community exceeds the official authorities communication), but also the source of a mass brainstorming permanently fertile, capable of generating the most unusual forms of protest. The diversity of messages and ways of expression in public demonstrations (floats, street dramatisations, die-in, brain drain, rounds of obstinate) – the product of a lucid creativity and not an impulsive act of rebellion – confirming the working hypothesis.

In the new European context, opportunities generated by inherent socio-cultural changes should not lead to a convergence in content of specific features (especially in education) of any society or community. “The overlapping of European cultural melting pot model on the old one of socialist common dream for Eastern countries, should not replace any of the specific existential coordinates of local communities” (Stoiciu 2009: 268).

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IN MEMORIAM



DR. THEODOR ENĂCHESCU (1919–2014)

Le 26 avril 2014 le médecin anthropologue Theodor Enăchescu est parti, d'un âge vénérable, pour se reposer un peu dans les Champs Élysées, d'où son âme vertueux surveille le destin de l'Institut de Rainer, son maître et de l'anthropologie roumaine auquel il s'est dédié pour toute sa vie.

Né le 22 avril 1919 dans le village Arbănași, commune Beceni, département Buzău, dans une famille avec quatre enfants qui ont suivi des études supérieures en droit, chimie et médecine et le père technicien sondeur en industrie pétrolière, le docteur Th. Enăchescu a mené une vie assez pleine de frustrations mais riche en événements historiques, politiques et professionnels.

Photo arrangée par Prof. Dr. Gheorghiță Geană („Francisc Rainer” Institute of Anthropology, Romanian Academy, Bucharest).

ANN. ROUM. ANTHROPOL., 52, P. 99–102, BUCAREST, 2015

Entre 1937-1943, Th. Enăchescu a suivi les études universitaires de la Faculté de Médecine Humaine de Bucarest, étant impressionné spécialement par la personnalité, les leçons et les conférences d'anatomie et d'anthropologie du savant et Professeur Francisc J. Rainer (1874-1944). L'année 1937, moment de l'entrée à la faculté du Th. Enăchescu, représente une rencontre heureuse de circonstances pour l'anthropologie roumaine: l'édifice de l'Institut fondé par Rainer est presque fini, aussi son Musée. En même temps à Bucarest a lieu le XVII-e Congrès International d'Anthropologie et Archéologie Préhistorique avec le Professeur Eugène Pittard parmi les participants. Francisc Rainer y présente les *Enquêtes anthropologiques dans trois villages des Carpathes*, la première recherche de référence et de profondeur des populations roumaines.

Titulaire (en 1943) d'une licence universitaire en médecine générale et chirurgie, le jeune Th. Enăchescu est incorporé, en qualité de médecin sous-lieutenant, à l'Hôpital 13, Campagne 7 sanitaire et participe sur le front d'ouest de la Seconde Guerre mondiale, jusqu'en 1945, quand, trouvé sous un fort bombardement, souffre un choc psychique et revenu à Bucarest, sans maison et aucune source financière, il accuse une dépression prolongée et adynamie physique, étant soigné par la famille. En plus, le régime communiste, sans reconnaissance pour un vétéran de guerre, confisque la propriété forestière de son père et pose une stigmatisation de longue durée sur tous les membres de la famille. Sous un tel fardeau injuste et en dépit de toutes les vicissitudes supportées en conséquence, le docteur Th. Enăchescu commencera dès 1948 sa carrière dans la recherche anthropologique.

Entre 1948-1950, Th. Enăchescu travaille comme assistant volontaire à l'Institut d'Anthropologie et, après la réorganisation de l'Institut sous la coordination de l'académicien Ștefan Milcu, il est engagé conservateur du musée, responsable des collections de Rainer, riches, valeureuses et complexes. En même temps, presque toujours avec une autre grande personnalité de l'anthropologie roumaine, Dr. Suzana Grințescu-Pop (1908-1977), il commence les recherches en anthropologie populationnelle et auxologique.

L'étude du nouveau-né, étendue au cours de plus de 25 ans, considéré la première de telle sorte en anthropologie, a suivi – sur des centaines de nouveaux-nés - des aspects concernant la variabilité dimensionnelle et de la conformation en relation ontogénique avec l'adulte, selon les facteurs mésologiques (urbain/rural etc.), la durée de la gestation, l'origine des parents (autochtones/immigrés), sex-ratio, le dimorphisme sexuel, l'accélération du développement physique, la capacité adaptative du nouveau-né etc. Les recherches anthropologiques d'auxologie consignent aussi les études des autres étapes ontogéniques en incluant la croissance et concernant le développement somatique et psycho-sociale de l'enfant préscolaire, la période péripubérale et la maturation sexuelle, aspects de microévolution chez les adolescents, étudiants etc. Après le tremblement de 1977

et la perte du dr. Suzana-Pop, le docteur Th. Enăchescu déploie entre 1977-1985 une ample étude mixte-longitudinale – un plus vieux projet conçu avec Suzana Grințescu-Pop et Cristiana Glavce – sur la croissance entre 3-18 ans des enfants de Bucarest et d'une zone rurale d'altitude (Bran-Rucăr), l'objectif final étant l'élaboration des modèles de croissance, à l'aide des percentiles, selon l'âge, le sexe et le milieu de vie. C'est une période fertile de sa vie aussi par la préparation de nouveaux anthropologues.

Les recherches sur les différentes populations roumaines adultes entreprises par Th. Enăchescu et Suzana Grințescu-Pop (quelques-unes en collaboration avec Olga Necrasov, C. Rișcuția, Cristiana Glavce etc.) se caractérisent par une méthodologie, un contenu et une vision monographique moderne, complexe, ayant l'empreinte de la tradition Gusti-Rainer. En 1965, Suzana Grințescu-Pop, Th. Enăchescu et Vl. Georgescu ont publié la „Morphogramme taxonomique”, un instrument graphique en partant des échelles „universelles” de variation des caractères métriques céphaliques, important pour l'analyse rapide et l'interprétation comparative des phénotypes. Les données et les résultats des enquêtes morphotypologiques, les dyagnoses et les aspects microévolutifs sur les Roumains de la Vallée Supérieure de Bistritza Moldave et Bicaz, dans Ținutul Pădurenilor, Pays de Hațeg, Mărginimea Sibiului, Pays de Vrancea, Couloir Bran-Rucăr, etc. ont connu leur valorisation aux diverses réunions scientifiques nationales et internationales et leur publication dans quelques monographies (*Clopotiva, Nucșoara et Câmpu lui Neag* etc.) et dans les revues de spécialité. Ceux-ci avec la morphogramme taxonomique, ont constitué aussi (parmi d'autres) une base importante pour l'élaboration des Atlas Anthropologiques des provinces et de la Roumanie, des volumes publiés dans la dernière décennie. Il faut souligner que Th. Enăchescu et Suzana Grințescu-Pop ont été, en 1974, sous la direction d'Olga Necrasov, aussi des coauteurs du premier projet d'un Atlas Anthropologique de la Roumanie. Préoccupés spécialement par les aspects concernant les particularités morphotypologiques des Roumains par rapport aux autres populations européennes, Th. Enăchescu et Suzana Grințescu-Pop ont y soutenu, comme Fr. Rainer, Olga Necrasov, P. Fîru etc., la prédominance des éléments dinariques et dinaroïdes (hauteur surmoyenne, pigmentation foncée, brachy- et hyperbrachycéphalie, hipsicéphalie, leptoprosopie etc.), lesquels, dans certaines régions, ont une forte concentration pour justifier la séparation de la conformation dinaroïde comme une « entité taxonomique ». D'une manière comparative, d'autres ethnies ont été étudiées, comme les Bulgares de Vinga, les Saxons de Hălchiu etc. Les aspects d'anthropologie médicale sont aussi présents dans les recherches populationnelles (Pays de Loviște, Couloir de Bran etc.).

Concernant l'anthropologie appliquée, Th. Enăchescu, avec dr. Suzana Grințescu-Pop, a effectué des recherches d'anthropologie ergonomique conformes au Programme biologique international concernant l'adaptabilité humaine, considérant que par l'organisation d'une surveillance anthropologique des populations on peut

réaliser un système de références par la poursuite des certains paramètres anthropologiques dans une population, une région et au niveau national, système utilisé puis dans la sélection professionnelle, la projection et construction des machines et d'outils, des espaces de travail etc. Les deux anthropologues ont effectué des études sur la plasticité morphologique humaine selon le profil de travail sur les travailleurs forestiers, métallurgistes, les femmes textildes, etc. et, en 1973, ils publient pour la première fois en Roumanie, un travail concernant la prospection d'ergonomie anthropométrique. Les expertises anthropologiques de recherche en filiation (paternité/maternité), effectuées en collaboration avec L'Institut de Médecine Légale, font part aussi de l'anthropologie appliquée.

Dans le contexte politiquement restrictif, le docteur Th. Enăchescu a effectué des visites et des échanges d'expérience seulement dans quelques pays socialistes, entre 1956-1970 (URSS, Hongrie, Bulgarie, Pologne). Les travaux scientifiques publiés, comme premier auteur ou coauteur, comptent d'environ 100 chapitres ou articles dans diverses revues de spécialité roumaines ou étrangères (Tchécoslovaquie, Bulgarie, France, Allemagne, Suisse etc.). Un bon organisateur, par vocation, des manifestations scientifiques et des recherches complexes de terrain, Th. Enăchescu a recueilli personnellement un grand volume de données et a été préoccupé d'encourager les jeunes anthropologues. Il a activé aussi pour la conservation des traditions positives de l'école roumaine d'anthropologie. A la fin de 1985 le docteur a été mis en retrait et, progressivement, s'est produit la cessation des activités professionnelles et l'isolation dans sa famille.

Le médecin anthropologue Th. Enăchescu reste pour nous, avec sa figure élégante et aristocratique, un pilier de l'anthropologie roumaine, comme le professeur Rainer souvenait, dans son Journal, les mots de Nicolae Iorga: „La valeur d'un homme on la voit dans le mesure dont il peut se dédier pour les autres”.

Eleonora Luca

Cornelia Rada, Cristina Faludi (Coordinators) *Funcții și disfuncții ale familiei contemporane. O abordare socio-psiho-medicală*. [Functions and Dysfunctions of the Contemporary Family. A Socio-psycho-medical Approach], București: Editura Universitară, 2015, 240 pp.

Review by Adina Baciu*

The volume *Functions and Dysfunctions of the Contemporary Family. A Socio-psycho-medical Approach*, coordinated by Dr. Cornelia Rada and Dr. Cristina Faludi is a journey through multiple and complex aspects that characterize the family in today's society. The subjects covered are very interesting and are addressed by the authors carefully and under different perspectives (multi-, inter- and transdisciplinary perspectives). The twelve authors, doctors, psychologists and sociologists, scientists and university teachers, under the guidance of rigorous coordinators harmonize the results of studies based on a thorough documentation and modern statistical papers, in a single volume which deals with various facets of today's family dysfunctions.

The volume begins with Adriana Albu's study describing the importance of the family in shaping behaviors and eating habits of children and teenagers. The author points out that family, friends, school, media are models, especially in the first years of life, affecting feeding behavior of children and adolescents.

Aspects of family's economy are presented by Corina Bistriceanu Pantelimon in a paper arguing that the division of labor, the base of economy's output, the main agent of the property – elements that characterize the analysis of family or traditional economy – are strongly atrophied in the contemporary society, due to losses in density and consistency of family resources.

In a society where information and communication technology develop continuously, an issue that is of particular interest to parents regards children's activities in front of computers, and is treated in this volume by Cătălina Croitoru. The author presents the correct positions, and also incorrect postures and hands' position while using the computer, and various medical issues that occur in children's lives after prolonged computer work, adding useful tips while working at the computer.

The role of the family in assisting the elderly suffering from different conditions, is presented by Rozeta Drăghici, who states that "modern society generates old age, but rejects it and isolates it at the same time". Also, the author states the importance of family in the life of the elderly, which may act either beneficially, therapeutically, as family cooperation plays an important role in the success of medical treatment, or negatively, accelerating the aging process.

The implications of aging are discussed by Cristina Faludi, who, after several thorough statistical papers, presents results regarding life arrangements, health and loneliness of the elderly from three former communist countries in Eastern Europe, namely Bulgaria, Romania and Russia, trying to capture the vulnerability of elderly people in these countries, in order to implement health policies to raise the quality of life for elderly people.

Bogdan Ionescu describes the mechanisms of children's deviant behavior and stresses that it is the result of family's major dysfunctions, out of which parental education plays an important role. Understanding and particularly knowing these problematic family relationships can prevent and correct juvenile deviant behaviors, contributing to positive child mental development.

Valentina Marinescu started the study on family communication and created the concept of e-health in Romania based on the idea that, in order to understand and apply information about health and disease, it is necessary to have a good communication within the family; she also stressed that an

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informational campaign to this effect must consider the degree of health information through the Internet, and also the discussions on medical topics with family members.

In the paper “She’s OK, he’s OK – Differences in the structure of life scenario by gender”, Oana Madlen Pănescu studied gender differences in terms of existential position and found that there are no gender differences in adopting the life position, the study participants, women and men, receiving the same education and being treated the same in their families. The author argues that the self-image of men and women can be built based on personal experience, their own judgment, rather than on the specific gender messages.

Cristina Petrescu presents the function of family solidarity and the failures that can be assigned to a family, adding the role of the therapist in terms of transactional analysis, pointing out that the therapeutic management of the family differs from the individual one. Also, she addresses several consequences of the solidarity’s function disorder, namely the installation and development of risk behaviors: drinking alcohol, verbal or physical aggression, jealousy and adultery.

In a particularly interesting chapter of this volume, Cornelia Rada and Monica Tarcea want to determine the correlation between the middle age and their onset of sexual life, marriage and birth of children, and the specific age considered appropriate for these events. Working on a sample of Romania’s population, the authors state that these issues can be analyzed only in their biological and socio-cultural context, lifestyle, social status, the access to information and culture playing an important role as well.

In “Anomy roles in the contemporary family”, Nicu Ionel Sava and Livica Frățiman explore anomic manifestations, which are increasingly common today in family contexts and emphasize that family patterns are frames followed and forwarded by children. The work is part of the efforts made in academic contexts, trying to raise awareness of the presence of harmful factors having a destabilizing effect on the family.

The following authors: Răzvan Turcu, Cristina Cotocel, Mihail Cristian Pîrlog, Anca Chiriță, in “The pattern of dysfunctional families and the behavioral impact on career partners” points out that the professional activity of individuals may be affected by imbalances in family contexts, in a society that pays an important role to carriers. They also show that dysfunctional families are becoming more and more visible in the media, which has a negative impact on the younger generation.

The actuality of the issues addressed in this volume, carefully coordinated by the authors, and also the interest of specialists from various fields in the evolution of family in modern societies, recommends this book to a wide range of readers of different ages, and opens horizons for new social, cultural, psychological and health approaches on the nowadays’ family.

Michael Ruse, *The Philosophy of Human Evolution*, Cambridge, New York: Cambridge University Press, 2012, x+282 pp.

Review by Richard David-Rus*

The author is a well-known specialist in philosophy of biology (also founder of the journal *Biology and Philosophy*) whose research over the past half century marked the field. His major contributions are related to different topics such as the relation between science and religion, the debate creationism-evolutionism and the demarcation problem in science. It is therefore valuable from the beginning to get in contact with a philosophical perspective on human evolution through the eyes of such a connoisseur.

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Despite the huge quantity of literature accumulated in philosophy of biology in the last decades and the growing importance of the debated themes, it is hard to find analyses that contextualize these subjects to human evolution. The book is therefore a welcome addition in the literature, filling a neglected niche in philosophy of biology but also in the biological/anthropological literature.

The book covers a broad range of topics providing an overview of various subjects from both philosophy of biology and evolutionary issues on humans. (as a consequence of this span some discussions might appear to be restrained).

It targets a general audience avoiding a too technical philosophical argumentation but touching on the relevant aspects of the questions discussed (though one might accuse in a few instances a tendency of expediting or even trivializing important views discussed).

The first chapter (*Evolutionary Biology*) introduces the reader to the major ideas of evolutionary biology with an emphasis on Darwin's original claims. The core arguments are presented together with the later (post-Mendelian) challenges and changes. Alternatives to Darwinism (Kimura's neutral theory or Wright's drifting balance theory – a “non-Darwinian a theory as it is possible to have” in Ruse's words) are also briefly discussed and evaluated. The presentation lies emphasis on the specific explanatory strategy that grounds Darwin's arguments, the one that Whewell characterized¹ as ‘consilience of inductions’ (the “jumping together” of facts). Under this strategy we try to explain by putting together pieces of information from a diversity of independent sources so that the theory is supported by the convergence of evidence. In case of evolutionary biology such sources of evidence are to be found in various scientific fields covering a large spectrum including, for example, systematics, morphology, embryology paleontology biogeography geology etc..

The second chapter (*Human Evolution*) presents a history of ideas on human evolution having a rather informative goal. It ends with a section that refers to culture and consciousness from the perspective of biological evolution.

The third chapter entitled *Real science? Good science?* is the first one to touch directly on genuine philosophical subjects. Questions related to the status of Darwin's theory as a theory in the classical sense i.e. as comprising a body of laws and also the role of laws in biology are opening the agenda. The next sections move to discussing adaptations and final causes that are essential ingredients in evolutionary explanations and also the place and necessity of some constraints in such explanations (as Gould's famous ‘spandrels’). Ruse dedicates also some space to discuss such critical views as Stephen Jay Gould's accusation on Darwinians' of spinning ‘just so’ stories. The last sections focus on issues related to culture and its possible role under this adaptivist perspective. Subjects as memes and memetics (as supported by Dennett's views but also Lewens' and Edmonds' critiques on memetics), cultural evolution as found in Boyd & Richerson modeling work on cultural evolution or religious beliefs focus the author's analysis. Ruse remains in general cautious or even skeptical in some places in what regards this sort of evolutionary explanation of culture or religion.

The idea of progress in Darwin's eyes but also his followers and more recent evolutionary biologists makes the object of the fourth chapter (*Progress*). The reader is presented with various views on the link between progress and evolution (from Darwin's position up to present ways to conceive biological progress – J. Huxley, R. Dawkins, Krebs etc) but in the same time the author critically examines the different attempts to operationalize the notion of evolutionary progress (as for example Dawkins attempt with reference to the progressive increase in computing power needed simply to get an organism to function as expressed through Jerison's animal's encefalization quotient – EQ). The chapter ends by acknowledging the lack of a clear cut answer regarding evolution theory and progress up to humankind.

¹ In his book *The Philosophy of the Inductive Sciences, Founded Upon Their History* published in 1840.

The fifth chapter (*Knowledge*) addresses the more philosophical subject of knowledge. The different ways in which epistemological issues are modeled or make reference to evolutionary ideas as in evolutionary epistemology, getting the reader through Popper's conception on growth of knowledge to Konrad Lorenz idea that evolutionary theory might lead to an updated form of Kantian epistemology (our basic categories of thought casted as 'inherited working hypotheses'), but also Quine's naturalism or Sober solution to induction problem, or the applications to scientific change as in Toulmin's conception of scientific theory development are presented and evaluated. We find also a discussion on the importance of metaphors in scientific knowledge, emphasizing their cognitive and heuristic value (section *Metaphors*) and an entire section (*Naturalism self refutation?*) focused on defending the evolutionary perspective on mind and knowledge from the critiques formulated by Nietzsche and Plantinga (according to which Darwin's theory implies that human beliefs track just fitness rather than truth). The author makes a plea (at the end of the chapter) for a sort of 'bio-cultural' (one might say) view on knowledge claiming that scientific theories are in the same time "based on biology" and "part of culture" and that we "should be very careful about any theory of science that does not take seriously human nature, its powers, and its limits".

Chapter 6 (*Morality*) introduces the reader to the important moral consequences of Darwin's theory as applied to humans. The discussion centers in the first part on the important subject of altruism in biological perspective with its connection to the levels of selection issue. The influences of Darwinism on social thinking and normative ethics (*Social Darwinism* section) is presented and discussed and the "naturalistic fallacy" (i.e. making the move from *is* to *ought*) as a critique of the traditional evolutionary ethicist and other critical responses are subsequently presented (in *Progress again*). Further links between evolutionary biology and moral thinking are exposed by reference to Rawls' work on justice theory (justice as fairness) and the discussion of the classical trolley problem in ethics. The chapter ends with discussing issues related to foundations of such ethics (*Ethical skepticism*) – the metaethical justification that the evolutionary biologist might offer and with some remarks on the reality and objectivity of the moral facts.

Chapter 7 (*Sex, orientation, and race*) is dedicated to the presentation and discussion of three important subjects for which Darwinism has a lot to say. After reviewing the biological reasons for the existence of sex, the author presents Darwin's opinion on sex, sexual selection and the differences between men and women. He discusses the possible sexist accusation on Darwinism (*Is Darwinism sexist?*) and proceeds further on the debates on sexual orientation. On discussing the different biological views on the last issue, the authors also emphasizes the distinction between the proximate and the ultimate levels of biological approach. The ethical implications of the biological perspective on sexual orientation are also discussed before addressing in the next sections the subject of race. The reality of races is discussed after presenting the debates concerning the related evidence (*Are races real?*) and the section on the moral aspects of racial thinking (*Is racial thinking immoral?*) ends this sensible subject.

The last chapter deals with the subject of eugenics and medicine (*From eugenics to medicine*). After a brief history of eugenic thinking, the next sections address subjects treated to evolutionary medicine and its philosophical consequences. Proximate versus final causes are mentioned in order to deal with the issues raised and topics central to philosophy of medicine as values, illness or health are touched on.

The book makes for an enjoyable reading getting the reader through a great variety of topics in a quick and dense but readable manner. For the unprepared reader it might be nevertheless a bit too dense, but there are benefits on his side anyway.

The work is of great value for students and scholars, for scientists, biologists or anthropologists but also for philosophers who are looking for a brief introduction to philosophical issues related to human evolution. It is a necessary book for anyone interested in human nature providing the necessary perspective on the philosophical consequences of the evolution of humans.

Judith Okely, *Anthropological Practice Fieldwork and the Ethnographic Method*, Bloomsbury, London and New York, 2012, xii+200 pp.

Review by Sebastian Ștefănuță*

“This book is about the possibilities and creative potential in ethnographic fieldwork.” – is a phrase from the beginning of the book by which the reputed British anthropologist Judith Okely introduces us to the topic of her volume. A volume structured over seven chapters, plus an appendix with “questions for anthropologists”, one more containing some notes on anthropologists who accompanied her throughout the book, a rich bibliography and an index of proper names and terms. A volume dedicated to Edmund Leach, “who first introduced me to Social Anthropology”. An enterprise that is able to clarify – once and for all – the relation between social (and cultural) anthropology and other human sciences. A clarification based on more than one hundred paragraphs, many of them having freestanding ideas, which does not ease at all the effort of reviewing.

The volume is focused on stressing some *aspects* related to the stage of collecting ethnographical data that confers uniqueness to the *anthropological* fieldwork (p. xi). But the historical and the theoretical aspects are not neglected, the first chapter covers these. The novel approach consists of a vectorial changing: not the appreciation of the anthropologists activities through the glasses of fieldwork methodological principles, but the characterisation of the fieldwork looking at what the anthropologist are in fact doing. Specificities of the fieldwork that are usually neglected or covered in social anthropology research are revealed (p. ix). Their direct exposure in the final texts seems to result in the discrediting of the anthropological enterprise. For the author, on the contrary, they represent a firm base on which an authentic scientific knowledge of man could be built. Judith Okely is thus following a tradition in which the preoccupation with what the fieldwork means as a personal experience is especially the prerogative of women-anthropologists (Cohen and Naroll 1973: 9).

The volume itself has an anthropological hall-mark. It emerges as a result of fieldwork endeavours. This time, the community under the study is quite the anthropologists’ community. Methodologically, the foreground is occupied by discussions and interviews of up to four hours with more than twenty renowned anthropologists (p. xi). They are famous characters within the contemporary anthropology: Paul Clough, Louise de la Gorgendière, Michael Herzfeld, Signe Howell, Margaret Kenna, Nancy Lindisfarne, Joanna Overing, Helena Wulff etc. Their fieldwork biographies in Ghana, Senegal, Greece, Indonesia, India, Venezuela and so on, and academic, museum work and other careers are briefly described in “Notes on Anthropologists and Interviewees” (pp. 157-162). The methodological background is occupied by the exploration of a rich bibliography.

The aspects brought into the light firstly come out from an ensemble of ‘anecdotically’ marked themes proposed in the dialogues with the mentioned anthropologists. They come out from an analysis of the gathered data, which reveals “an extraordinary set of both commonalities and some pertinent contrasts; all open to systematic theorising” (p. 4). However, the first chapter, “Theoretical and Historical Overview”, is bibliographically made. The overview is intended to bring up to the surface peculiarities by which the social and cultural anthropology *nolens volens* set itself apart from the traditional (positivist) mode of conceiving scientific research. The ideas exposed here, resonating and retaken throughout the book, are confirmed and acquire power in subsequent chapters, where the foreground is more and more occupied by anthropologists. Thus, the verb is not “to conduct” but “to experience” in relation to fieldwork (p. 5). The work based on hypothesis and the mere quantitative methods are unsuitable to anthropological enterprise (pp. 8, 9, 43, 83, 51 etc.). The best approach is an *open-ended* one (pp. 11, 21, 22, 51 etc.), where the anthropologist is *disponible* (p. 54) to the

* Independent researcher.

knowledge opportunities offered by the field (pp. 51, 53, 59, 60). This receptivity often has the effect of changing the topic (the whole of chapter three is dedicated to this phenomenon). This situation generates difficulties. The anthropologist will have to find out strategies of justification in the face of institutional sponsors. This will happen the more as the committees which provide subventions nowadays are interested not so much in scientific validity of the research as in the perspectives of “wealth creation” or “income generation” (pp. 9, 149).

The first paragraphs of the second chapter, “Unit, Region and Locality”, are dedicated to the deconstruction of some “caricaturisation” of anthropology. Among others, to the concept of isolate: “Fieldwork was never an isolate. Its limited location was [only] a heuristic device” (p. 27). The links to other populations were always described in the classical monographs. Or to the concept of fixed population. The consistent studies on some nomad peoples (also accomplished for many years by the author too at the travellers from nearby Oxford) are an irrefutable argument against any hard concept of fixed population.

It follows some intermediary paragraphs, in which the author notices that both in the colonial past and today, in another political frame, “Few [anthropologists], if *any*, knowingly acted as spies and ‘lackeys’ for the colonial rulers” (p. 33). The current efforts from the CIA of recruiting anthropologists as spies for Middle East are met with refusals. The acceptance of such proposals will have the effect – many anthropologists notice – to endanger *all* anthropologists (p. 35, 36).

The last paragraphs are dedicated to the reasons of which the places of research were chosen. The reasons are heterogeneous. Moreover, the personality, the unconscious and the aspect of chance have important roles to play, so that a pattern could not be established. From an initial focus on Pacific, Joanna Overing was to deploy fieldwork in South America. As soon as she reached Venezuela, she found that at that time of the year the river system does not permit the access to all populations. Thus she arrived at Piara (p. 42). The interest of Margaret Kenna was initially in Europe, in a Greek island. The fact that she finally stopped at Anafi was purely an accident (p. 40). But decades later, the British-female anthropologist was to become an honorary citizen of the island (p. 159).

One of the significant aspects which resulted from the conversations with different anthropologists is explored in the third chapter, “Choice or Change of Topic”. Judith Okely concludes that “In the majority of my dialogues, the anthropologists found that the main focus of their projected study changed once they were in the field” (p. 48). The examples abound two pages further: “[Signe] Howell, embarking on fieldwork in Tropical Forest Malaysia, did not find the expected systematic classification. (...) [Joseba] Zulaika, wanting to study in Africa, changed to violence in his home place. (...) [Mohammad] Talib responded to media scandal around indentured labour. (...) Subsequently, he was also to find himself unexpectedly studying a Hindu temple constructed by the labourers”, etc. The chapter in fact represents an inductive documentation of the mentioned aspect, and the paragraph “Further Examples of Changing Focus”, the substance of which is entirely based of interview extracts, is the longest of the book (pp. 56-74). The context is such that many of the rest of the paragraphs have no more than one page. The serendipity, the unforeseen and chance, combined with the receptivity of the anthropologist towards “what expects him” play important roles both in choosing / changing the place of fieldwork and the topic. Even the... mishearing! I set apart as one of the most anecdotal cases that of Donald Malcom McLeod, initially Edward Evans-Pritchard’s research assistant in working over material about Azande. Interested in witchcraft, he followed the advice of a French anthropologist regarding an African society in which the phenomenon can be studied. He arrived at Asante, in Ghana. Later, in the frame of an informal meeting, E. Evans-Pritchard reminds the French anthropologist about his assistant, recently returned from African Fieldwork. But the advice of the French was for *Azande*, and not for *Asante*. Moreover, once in the field, Malcom McLeod gave up the witchcraft and became more and more interested in material culture (pp. 60-61). It is possible that this change in interest opened for him the way to a subsequent museum career, crowned with a foundation of a museum on Asante in Ghana, in 1995 (p. 159).

In this context, the writing of a research proposal becomes difficult. More than that, by Margaret Kenna (p. 66), “How do I know what it is that I want to write until, through the exercise of writing, I find out what it is that I’m going to write?” The opening to the field, the possibility that the initial topic to change entirely, asks for a holistic approach, in a Malinowskian tradition (pp. 53, 75). The advice of Joanna Overing addressed to the students might seem unprofessional to the Romanian anthropological frame, still marked by tensions and searching for itself (Dorondel and Șerban, 2014): “Change if you have to – quick! Change groups. Change people. Change wherever you are. Change topics” (p. 53).

Another effect of “opening” and “flexibility”, of sensibility towards people as *special* objects (Geană 2005: 94), also deserve to be set apart in this chapter: the anthropologist is not an isolated observer. On the contrary, he/she makes friends, and some of the natives become real researcher’s assistants. Judith Okely even names them “indigenous intellectuals” (pp. 53, 142), stressing that they are to be found in all cultures. She thus follows a tradition of respect towards the native epistemological potential and its bearers (ibidem, 104). But she does not make the pace to a possible co-signing of the final products, the pace which seldom was made (see, for example, Ștefănuță and Șufană 2102).

The next two chapters, on participant observation, compose the core of the book and can only be taken into account together. The first, “Participant Observation: Theoretical Overview” is an overview of theoretical basis of participant observation, as the title suggests. The author notices that these bases are fragile, although the method is well established by the activity of Bronislaw Malinowski or Chicago sociological school. Moreover, the famous *Notes and Queries on Anthropology* does not contain in its index any allusion to the participant observation (p. 75). Inspired by an observation of Hortense Powdermaker (1967: 9), that “the discussions of the actualities of field work have been limited to private discussions between anthropologists, and these usually touch only high spots or amusing anecdotes”, Judith Okely reveals, one more time, that her purpose in this volume is just the interrogation of these anecdotes. A true anthropological knowledge, in the epistemological grill of the author, is only acquired when the researcher succeeds not in detachment, but in attachment to the object. And if the objectivity has as a first order methodological principle the “invisibility” of the researcher in his/her relation to the object, a “Greater invisibility may be achieved by participation, rather by distancing” (p. 80). The participant observation means a “total experience”, in which the body, the mind, the imagination and the intellect are interconnected (p. 80). The one-year fieldwork remains the ideal practice, with a “shared residence and 24-hours-a-day presence for a total participation and joint living” (p. 84). The methodological requirement clearly distinguishes itself from intermittent periods and transitory journeys into the field, “where the sequence of events are lost and where there can be no chronology of understanding and trust.” Sometimes, a one-year period seems insufficient to many anthropologists. They feel the need to return for longer and shorter periods of time, gathering decades of activity with a single population, as Margaret Kenna in the Greek island of Anafi (p. 159). Other times, a year is not enough for the people itself; Malcom Donald McLeod found that he has naturally access to all sorts of information only after thirty years from his first fieldwork (p. 142). We remember here the case of the anthropologist Marcel Griaule, who needed fifteen years activity at the Dogon (the superior part of the river Niger) in order for the council of elders of lineages and priests to decide to share with him aspects of their local religious system in depth (Dieterlen 1970: 16).

That a veritable anthropological knowledge is acquired quite by imaginative, emotional, bodily, etc. *involvement* in day-to-day life of studied people is documented in the next chapter, “Participant Observation. Examples”. The foreground is filled again by the author’s anthropologists-partners of dialog. The participation through work is a safe way of community insertion and access to the indigenous knowledge. In the course of the work, the anthropologist finds out that the informational flux flows easily (p. 80). Moreover, to work means the possibility to sustain yourself in

the field, having as a result that – I add – *the social and cultural anthropology is a branch of science which keeps an independency horizon towards sponsor institutions and, of course, their ideology and politics*. From this possibility a lot of anthropologists benefited, as Christine and Stephen Hugh-Jones, or Akira Okazaki (p. 99) and Ignacy-Marek Kaminski (p. 104) among those interviewed by Judith Okely. The participation might be *bodily*, by way of the dance, a way soon discovered by Hélène Neveu Kringelbach in Senegal (p. 96), or by way of the illegal selling activities deployed by I-M. Kaminski alongside Gypsies in Suedia (p. 104). The participative insertion in the local production system might be more appropriate for the familiarization with the productive techniques than a method relying only on questions and observations. By this, Paul Clough in Nigeria was to find the superiority of local knowledge regarding the culture of sorghum, in contrast with the recommendation of a World Bank Agricultural Project (p. 103). And the “examples” might continue.

The central position of the body in the anthropological knowledge is showed in the sixth chapter, “Fieldwork Embodied”. The body with its senses, sensibilities, idiosyncrasies and vulnerabilities seems to have lost, along with Descartes, the position of a source in genuine scientific knowledge. More than that, the *cerebral* scholar has to discard any interference between body and the object of its knowledge. In this context, Judith Okely follows the phenomenology (Merleau-Ponty, 2012) in regaining the cognitive potential of the body.

One of the commonalities of all the mentioned anthropologists is that “bodily engagement is invariably implicit in participant observation” (p. 107). Regarding her experience in Normandy, the author states: “I absorbed culture through the mouth. I had to digest it. When drinking the still warm milk from a Normandy cow, I was drinking the landscape” (p. 108). The taste, as well as the smell, reveals aspects that only the sight (so the observation) can not reveal. The impression management makes the street children from the capital of Mexico say that do not use drugs. But the smell betrays them in the face of Roy Gigengack (p. 121). By *empathetically* bodily imitation, Akira Okazaki finds out that the most ordinary ways of standing are culturally conditioned (p. 115).

The bodily influences in the act of knowledge, sometimes against it, are beyond rational control. Thus, “The biological sex and perceived ‘race’ of the fieldworker were often first bodily markers for the people in whose group or society the anthropologists came to live” (pp. 108-109). The consequences are important: the body (with its appearances of sex, race, ethnos, class etc.) influences the *access* (an aspect discussed in the next chapter). Moreover, the bodily fragility is able to entirely overturn even the most meticulous plan of research. Jonathan Parry, studying the death rituals in Banaras, India, is diagnosed with typhoid after he drank water from a sacred well. Akira Okazaki suffers hepatitis at Masai. Joanna Overing is infested with parasites in the South American tropical forest (pp. 122-123).

The seventh chapter, “Specificities and Reciprocity” brings together topics that could be treated separately. The first of them, on “specificities”, comes as an extension of the previous chapter. Gender, marital status (for married anthropologists, the family presence in fieldwork or not), ethnic differences, personality of the anthropologist etc. are important variables by which the relationship between anthropologist and native people gets configure. The anthropologist’ personality, especially, seems to me an ignored aspect in the fieldwork research of the last decades. From continuous interaction between anthropologist in his/her uniqueness and the *others* comes out the ethnographies. In the perspective of final texts, “The specificity, positionality and personal history of the anthropologist are resources to be explored, not repressed” (p. 125).

The paragraphs about key associates mark the passing to the topic of reciprocity. A motif that appeared for the first time in the third chapter is retaken here. Signe Howell, after she relates the context in which she met his future associate in Malaysia, states: “She then became my mother” (p. 143). It is not clear if she became “as a mother” or the anthropologist was to penetrate the local kinship system. Although the category of kinship is many times touched in the volume, the aspect of

the penetration of kinship systems by the anthropologists is neglected by the British author. Considering the general objectives of the volume, some reputed papers on this topic, (Lydall 1988, for example), the mentioned aspect had to be taken into account.

The reciprocity may be considered as high evidence that a truly anthropological enterprise assumes the *implication*, not *detachment* of the anthropologist in his/her relation to the fieldwork. The acknowledgement / reciprocity for hospitality, shelter and kindness in sharing the information can take the most unexpected forms. Thus, the academic prestige of Carol Silverman meant the possibility for gifted bands of Roma musicians to produce their music on respectable labels in the USA (p. 148); Suzette Heald has organized for years a special fund for girls' education in schools in Kenya (p. 150); the bureaucratic expertise on development issues was of a big help for Louise de la Gorgendière in collecting funds in order to dig a well in a Ghanian village etc.

In the end, I express one more time the conviction that the volume *Anthropological Practice Fieldwork and the Ethnographic Method* is able to give a clear perspective over the fieldwork and methods to use in social and cultural anthropology. I consider it a fundamental reading for actual and future Romanian anthropologists. Trained in the frame of different branches of science – sociology, history, philology etc. – they are permanently filled with the temptation to imprint on anthropology the hall-mark of their initial training. Although the dialogue between these branches and anthropology could not be but fertile – not just in the sense that the firsts influence the second, but converse too (Chryssides and Geaves 2014: 4, in the study of religion, for example) – the book of Judith Okely demonstrates that the anthropology has a profile of its own, which does not confound with any of the profiles of mentioned branches. For another argument, I recommend the parallel reading of Henri H. Stahls' *Tehnica monografiei sociologice (The technique of sociological monography)* (2001). Although it envisages the work in big teams, this book by a Romanian sociologist is as relevant for the particularity of sociological research as is the volume of British female anthropologist for the particularity of anthropological research.

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Ion H. Ciubotaru, *Obiceiurile funebre din Moldova în context național* [Funerary Customs in Moldavia, within the Romanian National Context], “Alexandru Ioan Cuza” University of Iași Publishing House, 2014, 762 pp.

Review by Marin Constantin*

Professor Ion H. Ciubotaru – born 1940, an eminent Romanian ethnologist from the Institute of Romanian Philology “Alexandru Philippide” of Romanian Academy, Iași – has authored this impressive tome dedicated to the funerary ceremonial complex in Moldavia (relying on the answers received to 102 items of a questionnaire about burial in over 800 locations), as well as – in a larger national contextualization – in the rest of Romania and still, among Romanian groups from Bulgaria and Serbia. The book is the *magnum opus* of a comprehensive collective project on the family ritual process in Moldavia, also including *Obiceiurile de naștere* [Birth Customs, by Alina Hulubaș] and *Obiceiurile nuptiale* (Wedding Customs, by Silvia Ciubotaru), actually updating the well-known thematic trilogy of Simion Florea Marian (1890, 1892). All these volumes are research developments based on the collections of the *Folklore Archive of Moldavia and Bukovina* (AFMB) within “Al. Philippide” Institute.

It is worth mentioning that, during his prestigious scientific career, Professor Ciubotaru has been constantly preoccupied of the research theme he discusses in the current book, including his PhD thesis from the 1970s. During more than three decades and half after his doctoral work, Professor Ciubotaru published fundamental studies and books of a high appreciation among specialists, such as *Cadrul etnografic al cântecului funerar pe valea Șomuzului Mare* [The Ethnographic Framework of the Funerary Music from the Valley of Șomuzului Mare] (in the journal *Anuarul Muzeului Etnografic al Transilvaniei*, Cluj-Napoca, X, 1978, pp. 371-390), *Cântecul de priveghi în Moldova* [The Funerary Wake Music in Moldavia] (in *Anuar de Lingvistică și Istorie Literară*, Iași, tome XXX-XXXI, 1985-1987, pp. 91-113), *Folclorul obiceiurilor familiale din Moldova (Marea Trecere)* [The Folklore of Family Customs in Moldavia. The Great Ritual Passage of Death] (Iași, *Caietele Arhivei de Folclor*, VII, 1986, 580 pp.), *Marea trecere. Repere etnologice în ceremonialul funebru din Moldova* [The Great Ritual Passage of Death. Ethnological Landmarks in the Funerary Ceremonials in Moldavia] (Bucharest, “Grai și Suflet – Cultura Națională” Publisher, 1999, 330 pp.), *Doliul: categorii, forme de manifestare, vechime, semnificații* [The Mourning: Categories, Forms of Manifestations, Ancienty, and Meanings] (in the *Anuarul Muzeului Etnografic al Moldovei*, XIII, Iași, 2013, pp. 67-90), and *Rituri funerare străvechi: Pomana de viu* [Ancient Funerary Rites: The Funerary Ceremonial Dinner for Living People] (in the *Anuarul Muzeului Etnografic al Moldovei*, XIV, 2014, pp. 89-114). The last two of the above-mentioned studies also make parts of the present work.

Professor Ciubotaru’s *Funerary Customs in Moldavia...* mainly consists of a *typology* of funeral rites and a *corpus* of 440 funerary texts and laments (*bocete*). In systematizing his ethnographic documents into ritual sequences of *separation*, *transition*, and *incorporation*, the author follows Arnold van Gennep classical theory of the rites of passage (1909) (p. 8).

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The volume is opened through an extensive “Introductory study” (pp. 11-66), practically reviewing a number of 29 themes associated with funeral, which Professor Ciubotaru takes in virtue of their “archetypal value” (p. 12). The subsequent list itemizes the images, symbols, and ritual behavior of *the living dead, the way from between the worlds, the sun’s trace and the waters’ course, the way towards right, the irreversible way, post-existence, the sleep and death, the funerary wake [the “Priveghi”], the funerary gifts, specific funerary repasts, the tomb enchaining, the ritual cloth change, the dead cloths, dendrophagy and dendromorphism, name tabooing, name writing, the magic of the name, nominal liturgies, commemorative lists of persons, unnamed people, the royal book, messages from the in-between worlds, the grave in the garden, the dead beauty, the other world grooms, the loving spirits, the malefic longing, death-as-weddings, and the cosmic liturgy*. References for all these facts are provided for Moldavia and further Romanian areas (Botoșani, Suceava, Iași, Bacău, Vaslui, Neamț, Vrancea, Făgăraș, Hunedoara, Năsăud, Gorj, Caraș-Severin, etc.), as well as from other countries and cultural traditions including Greece, France, Scandinavia, Mexico, India, Egypt, Tasmania, Madagascar, etc. The author’s broad cross-cultural encompassing of funerary practices and beliefs also benefits of theoretical information from a series of outstanding scholars, both Romanian (Vasile Pârvan, Mircea Eliade, Petru Caraman, Ion Conea, Constantin Brăiloiu, Octavian Buhociu, etc.) and foreign (Fustel de Coulanges, James George Frazer, Émile Durkheim, Erwin Rohde, Carl Gustav Jung, Eric R. Dodds, Claude Lévi-Strauss, etc.)

The next chapter – “A bibliographic excursus” (pp. 69-144) – is a retrospective review of funerary-thematic documents in Romanian ethnography. “Documents” actually stand here for very diverse categories of information beginning with medieval arts (such as the frescos of Moldavian churches), then continuing with the accounts of Moldavian chroniclers (Grigore Ureche, Miron Costin, Ion Neculce, and Dimitrie Cantemir), and with written memories of foreign travelers across Moldavia and Wallachia (in the seventeenth century: Marco Bandini, Robert Bargrave, Paul of Aleppo; in the eighteenth century: E. H. Schneider von Weismantel). Another phase of Professor Ciubotaru’s *excursus* is that of “scientific orientations” in the works of intellectuals like Vasile Popp (with his 1817 doctoral thesis on Romanian funeral customs), Gheorghe Săulescu (with his 1841 “archeological” study of burial practices among Romanians); further references for this Romanian literature of ceremonies and faiths associated with death are (from the second half of the nineteenth century) Vasile Alecsandri, Alexandru Lambrior, Ion Creangă, and Teodor T. Burada. A next level of specialization in the academic research of funeral in Romania is distinct due to the questionnaire surveys of Bogdan Petriceicu Hasdeu (1877) and Nicolae Densusianu (1985), the monograph of burial practices among Romanians, by Simion Florea Marian (1892), and the collection of ethnological sources by Elena Niculiță-Voroncea (1903). Funerary beliefs and rites are also mentioned as a theme of scholarly research in Bessarabia, thanks to the works of Gheorghe C. Madan (1897), Zamfir C. Arbore (1898), Petre V. Ștefănuță (1933, 1937), and A. S. Hâncu and V. S. Zelenciuc (1979). For the interwar period, Constantin Brăiloiu is evoked essentially given his innovative role in the methodology of studying the funerary folklore in Romania with particular concern on the laments (*bocete*), as illustrated by case-studies of villages like Drăguș and Nereju. The questionnaires elaborated by C. Brăiloiu and Henri H. Stahl (1932), then by Petru Caraman (1933) are similarly representative for the fieldwork approach of funeral in interwar Romania. As to the contemporary sources for the study of funeral rituals and folklore, referential contributions are made by Ion H. Ciubotaru (1999), Lucia Berdan (1999), then (in the 2000s) by the *Folklore Archive of Moldavia and Bukovina* (AFMB), based on the works of Florin Bucescu, Silvia Ciubotaru, and Viorel Bârleanu, as well as a fourth volume of *Holidays and customs* (dealing with funeral in Moldavia), as authored by the Bucharest Institute of Ethnography and Folklore (2004).

Professor Ciubotaru’s ample “Typology of funerary customs” (pp. 145-298) is developed from his several *thematic questionnaires* (in addition to the general ethno-folkloric questionnaire), allowing

the author to categorize “clusters of habits” in accordance with their ceremonial succession and meanings (p. 8). As a result, one first acknowledges “Preliminary” customs including (I. A) *Death-announcing signs*, (I. B) *Practices of postponing or relieving one’s decease*, (I. C) *On the threshold between the worlds*, (I. D) *Preparing the deceased for his / her last way*, and (I. E.) *The funerary wake [the “Priveghi”]*. “Liminal” customs consist of (II. A) *The burial day*, (II. B) *The road to the cemetery*, (II. C) *The burial*, and (II. D) *Laments*. “Post-liminal” customs are related to (III. A) *The burial feast*, (III. B) *Incensing and watering one’s tomb*, (III. C) *Other funerary feats*, (III. D) *The fortieth-day funerary feast*, and (III. E.) *The mourning*. The “Cult of the Death” comprises the hypostases of (IV. A) *One’s decease between Easter and Pentecost*, (IV. B) *Commemorations through the year*, and (IV. C) *One’s funerary feast when still alive*. “Mythology of death” is referred to (V. I.) *The afterlife* (V. B) *Heaven and hell*, (V. C) *Poltergeists*, (V. D) *Vampires [Moroi]*, (V. E.) *Ghosts and visions*, (V. F) *The “Iele” and “Rusalii” feminine spirits*, and (V. G) *Ancestors’ souls as snakes*. The last typological collection is dedicated to the “Lament motifs”. Most of the aforementioned clusters are, in their turn, subdivided into regional contexts and specific local variations of death ceremonies and beliefs.

Another section of the book – “Anthropological perspectives” (pp. 299-426) – is represented by seven distinct studies, with regard to a series of funerary practices which, following Professor Ciubotaru (pp. 8-9), appear to be examined to a lesser extent in the specialized literature. All such themes (including *funerary magic*, *posthumous shelter*, *mourning*, *funerary bestiary*, *funerary-feast dancing*, *one’s funerary feast when still alive*, and *peaceful death*) are seen cross-culturally, with abounding examples from Romania, from the rest of European folk cultures, and even from worldwide ethnography. This time as well, the author’s erudition is practically encyclopedic, ranging from classical references like Homer, Herodotus, Euripides, Eschyl, and Vergil, to international scholars like Marcel Mauss, Leo Frobenius, Lucien Lévi-Bruhl, Vladimir I. Propp, Roger Caillois, Marija Gimbutas, as well as to illustrious names of Romanian academic culture such as Mihai Eminescu, Lazăr Șăineanu, Tudor Pamfile, I. Aurel-Candrea, Henri H. Stahl, Alexandru I. Amzulescu, Constantin Noica, Romulus Vulcănescu, etc.) Among the themes thus explored, one could remember the spells assuring invulnerability for folk epical heroes like the outlaws (pp. 311-314), the houses on graves as a relic of the ancient practice of suspended burial (pp. 329-330), the mourning chromatics and its symbolism (pp. 346-352), the birds of one’s soul or *death birds* (357-371), the *Chiperiul* funerary dancing of masked men (p. 397), *self-funerary* ceremonies of dining and dancing (pp. 409-411), and one’s premonition of his death (pp. 420-426).

The corpus of funerary texts (pp. 427-647) is organized into “(I) Laments” (with their subcategories of *I. A. Burial laments*, *I. B. Commemoration laments*, and *I. C. Miscellaneous laments*), along with “(II) The funerary-wake songs of *Priveghi*”, “(III) Ritual and ceremonial funeral songs”, and “(IV) *Funeral poetry (verșuri)*”. In their folk expression, the *burial laments* are addressed to each deceased member of one’s kinship network (including his / her parents, siblings, uncles and aunts, cousins, the in-laws, and godparents), as well as to one’s further defunct neighbors and acquaintances. Instead, the *commemorative laments* are circumscribed around departed members of one’s family. All these documents are transcribed in their vernacular Moldavian, and shown with their ethnographic references (such as original location, recording support, informer’s family and given name, his / her age, and the name initial letters of field collector). The corpus contributors are mainly specialists of the *Folklore Archive of Moldavia and Bukovina* (AFMB): Lucia Berdan, Constanța Buzatu, Lucia Cireș, Silvia Ionescu-Ciubotaru, and Professor Ion H. Ciubotaru himself. In the course of their work, the AFMB researchers have been helped by the following collaborators: Larisa Agapie, Viorel Bârleanu, Florin Bucescu, Mircea Fotea, Ștefan Popa, and Silvia Ravaru. Older thematic texts have been added from “Petru Caraman Corpus”, as collected in the 1930s by Dumitru Cumpăță, Neculai N. Dogaru, Dumitru P. Filip, M. Gospodaru, Vlad I. Gradiu, Ilie Grigorovici, Ovidiu Ichim,

Ion Istrate, George Moisuc, Trifon Nichiforel, Vasile Poescu, Emil Spiridon, Eugen Stamate, Vasile V. Timofte, Simeon Tiperciuc, and Mihai Ungurean.

The book is accomplished with the indication of its wide-ranging bibliography (313 references, pp. 649-665), the index of ethnographic locations (pp. 667-688), the index of interviewed persons (pp. 689-696), the index of the authors (pp. 697-705), and the thematic index (pp. 707-722). A number of 49 illustrations – most of which as photographs taken from Moldavian locations – accompany and complete Professor Ciubotaru's noteworthy treatise on the funerary traditions in Moldavia.

Funerary Customs in Moldavia is probably the best documented exposé of funeral (taken as a broader theoretical category) in Romanian ethnology to date. As shown above, it is not only an anthology of studies thematically unified around their common subject matter, nor is it simply an ethno-folkloric collection of vernacular accounts which, even if wide-encompassing geographically, would merely remain an archival repertory of texts. As a matter of fact, Professor Ciubotaru's book is a coherent interweaving of the specialist's *regard éloigné* (to use here Claude Lévi-Strauss' well-known expression) with his first-hand and teamwork-originated evidences from Moldavian / Romanian folk culture. In spite of its density of ethnographic and bibliographic information, *Funerary Customs in Moldavia* does address its readership not so much as a "thanatologic" encyclopedia, but mostly as an evocative narrative of what Romanians (in comparison with other traditions, more or less neighboring) believe, act, and transmit with respect to the deep spirituality of their rite of "Great Passing Away", or *Marea Trecere*.

Joy Hendry, Simon Underdown, *Anthropology. A Beginner's Guide*, Onworld Publications, Oxford, England, 2012, 207 pp.

Review by Marin Constantin*

The increasing specialization from the contemporary anthropology in a myriad of subfields and areas of scholarly "expertise" makes it accordingly difficult the endeavor of synthesizing the achievements of discipline into an introductory and yet comprehensive text, able to help anthropologists to better integrate and refine their own knowledge, and to allow other people (academics or not) to understand more from the classical and current research agenda of the "science of humans". Such a task is now undertaken by the "beginner's guide" of Joy Hendry and Simon Underdown, both of them teaching anthropology at the Oxford Brookes University, in the United Kingdom.

The authors rely (p. 1) on the fundamental and relativist premise that "As long as people have wondered where they come from, and speculated about the behaviour of neighbours brought up differently to themselves, they have been thinking anthropologically." This perspective remembers all of us our "common humanity", in terms of our "genetic unity" and "shared evolutionary history", as well as the irreducible cultural diversity of humankind (pp. 5-6). Hendry & Underdown's preliminary assertions do acknowledge thus the interwoven dimension – biological and cultural – of the science of anthropology and, as a result, of their book.

The first chapter of the volume – "The human body" (pp. 10-29) – is a discussion on the human phenotype, as equally contributed by "genotype plus environment" (p. 11) and crucially differencing humans from other primates in "body morphology, developmental period, and language", despite similarities "in skeleton, dentition, general adaptability, and DNA" (ranging as "96-99%" when compared to chimpanzees). With this evolutionary background, race is described to

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actually matter at the human “[skin] surface” (not on the genetic level), while body is also reflected upon as “a *model* for explaining and understanding the world” in “social and cultural purposes” including wearing uniforms, ceremonial clothing, tattooing, patterns of eating, washing, and eliminating waste, etc. (pp. 23-29).

With regard to the “Ways of thinking and communicating” (pp. 30-49), Hendry & Underdown account for variation in the manners in which “the people *rationalize* what they do and say”, based on correspondingly diverse systems of classification and explanation of the world, ideas of socialization, and forms of communication (non-verbal, symbolic, and linguistic). Language, according to the authors, appears as “improved communication” (p. 45), with “the increase of brain size [...] over time within the hominine sub-family”, and with “the larynx low position – able to generate a very large range of sounds – [...] identified for the genus *Homo* beginning with the species *Homo ergaster* – probably the ‘first human’, two millions years ago” (pp. 47-48).

The chapter “Organizing social relations” (pp. 50-67) broadly refers to social organization (in terms of equality, hierarchy, social power, ascribed and achieved status). Kinship is seen as “the basis of social relations even in modern societies” (within which “Residence, inheritance possibilities, and group membership are often clearly decided as the child is growing in the womb”, p. 58); various ethnographic references – such as the Nuer (E. Evans-Pritchard, 1940) – are herewith followed with regard to the importance of marriage alliances and descent groups for the political system or the continuity of ownership. The authors argue that “a good map could be made of relations within one community simply by observing the paths being followed as material things were carried to and fro” (p. 63), which is exemplified with the *patron-client relationships* among pastoral Sarakatsani in Greece (James K. Campbell, 1964), the circulation of armbands and necklaces among the Trobriand Islanders (Bronislaw Malinowski, 1922), and the obligations of giving, receiving, and repaying in the archaic exchange of the *gift* (Marcel Mauss, 1924).

“Engaging with nature” (pp. 68-85) is Hendry & Underdown’s approach of the complexity of human interaction with environment. The authors point to the continuous “relationship between biological adaptation [such as bipedalism and brain size] and cultural adaptation [for instance, tool use]” (which they consider to have begun as early as two million years ago, with *Homo ergaster*). Hendry and Underdown see “the role of cultural innovation” as “common for *Homo ergaster*, *Homo neanderthalensis*, and *Homo sapiens*” in their behavior within the “wide range of habitats without the need for further biological adaptation” (pp. 69-70). Along with cultural adaptation, humans are characterized by their “uniformity in genetic and physiological mechanisms of response to extreme heat, extreme cold, and extreme altitude”, unlike “non-human primates” whose “climatic adaptation varies between species and not just according to habitats” (pp. 71, 74). The authors also mention the “*culturally-constructed* perceptions of the natural world” including native people’s lifestyles of belonging to *their* environment, the idea of land ownership based of human settlement and agriculture, the universal distinction between *nature* and *culture* (Claude Lévi-Strauss), and the *nature* vs. *technology* dichotomy as expressed through material culture (pp. 76-78, 82-83).

Another chapter – “Personhood” (pp. 86-101) – reviews the multifarious ways of defining one’s personality in society, beginning with his/her birth and naming ceremonies, to encompass across cultures the “association [of] the newborn with the idea of soul or spirit”, consanguinity, titles and ranks, etc. Material substantiations of personhood are identified for *Homo sapiens* (i.e., cave painting), and still with “funeral evidences also suggesting this for *Homo heidelbergensis* (500 000 years ago) and for *Homo neanderthalensis*” (pp. 99-100). At the same time, Hendry and Underdown call attention to important cultural variation in the “presentation of self” as somewhat “theatrical” in terms of “acting”, “performing”, being “front” and “back stage” (Erving Goffman, 1959), and in behavioral

differences between *moi* and *personne* (Marcel Mauss, 1938), which reveals contradictory “role expectations of wider society” between “what people say *should* do, what they *say* do, and what they *do*” (pp. 95-97).

The sixth chapter of the book – “Ritual, ceremony, and identity” (pp. 102-118) – is a further exploration of personhood in what a symbol (as “the smallest unit of ritual”) or a ceremony actually engage the “behavior *prescribed by society*” (p. 102). In this regard, Arnold van Gennep’s perennial theory of the “rites of passage” (1909) provides the interpretive framework for otherwise disparate events like the rituals of separation in the case of pregnant Gypsy women in England (Judith Okely, 1996), naming ceremonies of initiation in Scotland, and ochre painting as a ceremony of incorporation, among Maasai (p. 107). As Hendry and Underdown remark (p. 108), “while many such rituals among Indigenous people appear to be cruel in front of Western people, the ‘modern’ industrial societies do not seem to have found a rite of passage that ensures full entry into adulthood, with adolescence described to extend into the twenties”. The authors also highlight the generally-human “ritualization of gender and sexuality” (knowing that “when a baby is born, the sex is usually the first thing to be announced”, p. 112), as well as the distinction in “creating an identity”, between *ascribed* status (what, for example, the rites of passage do) and *achieved* status (which depends on one’s personal *agency*).

It is the “Ways of belonging” (pp. 119-135) that, according to Hendry and Underdown, clarify the “relation between personal identity and a wider group, by language, religion, [and] ethnicity”. This time, *culture* and *nature* appear much more conciliatory with each other with “clan membership from a totem, pets as ‘members of human groups’, folklore of human-animal metamorphoses, shamanistic animal transformation”, etc. (p. 132). As to the “human kingdom” *per se*, its norms of belongingness include or resort to boundaries (ritual spaces, domestic and public spaces, politics, nations...), domestic spatialization for men and for women, distinctive dress of ethnic and religious groups, and – unfortunately – violence (ranging from terrorism and war to ethnocide). To follow the authors, criteria of (apparently) traditional belonging continue to be effective in contemporary world, since “within a street, you would give the house number, within a town or city, the street name, in another location, the town name, and so forth. Only in a foreign land would you name your country of origin” (p. 129).

With the chapter “The global species” (pp. 136-155), J. Hendry and S. Underdown engage in a “macro-level” anthropological overview from the human ancestry in the Omo Valley, Ethiopia, to the modern-times experience of markets, colonialism, and “development”. The authors evoke the “three major models” of explaining the human dispersal in prehistory, namely “(1) Out of Africa” (the most accepted model, with the behavior, culture, and biology of *Homo sapiens* in Africa – around 200,000 –, then spreading and replacing all of the other hominine population with little or no interbreeding), “(2) Multiregional continuity” (with *Homo sapiens* evolving from earlier *Homo erectus* in Asia or *Homo heidelbergensis* in Africa, with significant gene flow between populations, and with current differences as the result of the retention of some original hominine traits), and “(3) Assimilation” (with *Homo sapiens* evolving first in Africa, then dispersal and exchange of some genes with other human species in Europe and Asia) (p. 139). While human diversity in skin color is originated into the “clear biological relationship between the concentration of melanin (the pigment cells in the skin), exposure to sunlight, and synthesis of vitamin D, which is critical to the development of strong, healthy bones”, Hendry & Underdown remember us that, since “a human being may be the only animal that is utterly dependent upon culture for its survival”, “[humans] are more than the sum of [their] genes” (pp. 142, 143). In connection with agents of early globalization like the trade and missionaryism, human migration is also visible in, and responsible for, the *commodification of objects* (p. 148). Acknowledging the rise of the “anthropology of development”, the authors are at the same time aware of the “insidious vocabulary of *progress* and *development*” which helped “a limited number of nations to dominate the whole global system”, based on the diffusion of “values” like democracy, human rights, and capitalism (p. 152).

“Anthropology in the age of global communication” (pp. 156-172) is a further investigation of contemporary phenomena like the migration of labor force (including students) and political refugees, tourism (as an intercultural encounter affecting indigenous cultures), and technological change (basically through the internet and the making of diasporas, virtual communities, and *transnational connections* [Ulf Hannerz, 1996]) (pp. 157-162). In the attempt of assessing the *local impact* of such processes, anthropology is recognized its role in “helping local people make their voices heard in the world”, especially against that so-called “sustainable development” which, in terms of “biodiversity conservation” politics, comes to actually “neglect the human beings who inhabit an area under consideration” (p. 164-165). The authors also reflect on “the biology of the future”, with humans seen nowadays as “an integral part of a much wider ecosystem that extends across the whole planet”, and with the genetic identification (rather than anatomical description) for extinct human species (p. 170).

The last chapter of the book – “Practicing anthropology (pp. 173-183)” – inspects the state of the discipline in the changing world of today, which Hendry & Underdown do with respect to issues such as methodology (participant observation as “the real heart of anthropological encounter”, p. 174) and ethics (on the indigenous claims for reburial of their ancestors, and the internationally-agreed protocols to prevent fossils being removed from the country within which they were discovered, p. 179). Anthropological products like ethnographies, photographs, sound recordings, music / songs, videoclips, and films (p. 177) are expected to count on accurate interpretation of field evidences, either in the bio-anthropological study of fossils in an interdisciplinary perspective (anatomy, geology, physics, biology, etc.), or, in the case of cultural anthropology, in contextualizing the role and function of artifacts and generally “fitting field evidences and notes into the *holistic* picture of life” (p. 180-182).

Hendry & Underdown’s guidebook is explicitly written for anyone intending to get familiarized with the domain of anthropology as a whole (in both biological and cultural perspectives). In the authors’ words, “one of the chief aims of the book” is that of “opening anthropology to a wider readership” (p. 182). While such a generous purpose also depends on the (external) ways in which the book at issue is disseminated and reviewed (including the current strictly summarizing presentation), the intrinsic qualities of its text – notably, the style accessibility and the proportionate quantum of referential information – highly recommends it to students and specialists as well.

Marshall Sahlins, *What Kinship Is – And Is Not*, The University of Chicago Press, Chicago and London, 2013, 110 pp.

Review by Marin Constantin*

As if echoing Marshall Sahlins’ classical theses¹ about the inherency of culture in comparison with biological or economic processes, the basic argument of this book is to understand kinship as a *mutuality of being*, in the attempt of transcending the Euro-American “biological-corporeal substratum”, with its “procreation, filiation, or descent” (anthropological) terminology. To illustrate it, the author divides his work into two distinct and complementary sections, in terms of “what kinship is – culture” (pp. 1-61), and “what kinship is not – biology” (pp. 62-79).

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¹ M. Sahlins, *Stone Age Economics*, Chicago: Aldine-Atherton, 1972; M. Sahlins, *Culture and Practical Reason*, Chicago: University of Chicago Press, 1976.

According to Sahlins, the “kinship categories are not representations or metaphorical extensions of birth relations; if anything, birth is a metaphor of kinship relations” (p. IX). As such, kinship is also recognizable in cases of “ignorance of paternity and association of conception with ancestors, gods, dreamtime spirits, potency of enemies” (among Trobriand Islanders, p. 4), “land-generating [...] transubstantiation of ancestors” (among Iñupiat natives in Alaska North Slope, p. 6), “the plants who are children of Amazonian or New Caledonian women who cultivate them, or the animals of Siberia and Amazonia who are affines of the men who hunt them” (p. 30), etc.

In supporting his perspective, the author follows classical viewpoints against kinship-*cum*-consanguinity as when explaining it by other social facts, rather than reducing it to biology or psychology (Émile Durkheim 1898), and when such a biological interpretive preeminence makes of kinship “an artifact of the anthropologist’s analytical apparatus” (David Schneider 1972) (pp. 16-17). In kinship systems, to cite Sahlins, *mutuality of being* is simply “a manifold of intersubjective participations” (pp. 20-21) in experiences like “shared participation in ancestry, residence, commensality, land use, or other such media of mutuality” (p. 54).

Within a broader theoretical background, such definition echoes ethnographic findings like kinship as “inter-subjective belonging” (R. Stasch, 2009, on Koroway in New Guinea), and “constructing persons as the plural and composite site of the relationships that produced them” (M. Strathern 1988, on Melanesian societies) (pp. 22-24), as well as psychological views on the “innate intersubjectivity” based on a “mutualism” effective in neonatal and even prenatal mother-child interaction (C. Trevarthen and K. Aitken 2001) (p. 37). In the author’s terms, “the being-ness of humans is not confined to singular persons” since, in accordance with various “criteria of mutual being” (such as “having the same name, eating from the same land, born from the same woman”) it leads to a state of a “we-ness” that could not be encountered in primates (pp. 32, 38, 44).

Relying on all these ideas and facts, Marshall Sahlins addresses the following issue: how the “postnatal determinations of kinship” (also including those social relationships “for which no genealogical connection can be imagined”) are expressed “in (apparently) genealogical terms” – as if “the relations derived from procreation comprise the primary ‘code’ or ‘model’ of all human kinship” (p. 72)? Sahlins’ answer – “kinship is thicker than blood” (pp. 67-72) – basically emerges from his conviction that “[...] kinship is the *a priori* of birth rather than the sequitur” (pp. 68, 87). Is this only theory? Several Alaskan examples are demonstrative for what is probably similar in the kinship philosophy of many other cultures, that is, “One may be kin to another by being born on the same day (Inuit), by following the same tabus (Araweté), by surviving a trial at sea (Truk) or on the ice (Inuit), even by mutually suffering from ringworm (Kaluli)” (p. 68). As a result, any substantial evidences of physiology – like “the blood, milk, semen, bone, flesh, spirit” – are to be foremost seen as “meaningful social endowments that situate the child in a broadly extended and specifically structured field of kin relationships” (p. 74), thus testifying for the *mutuality of being* as an essentially cultural “nature” of kinship.

Marshall Sahlins’ book is open to further assessment of kinship theorization, with a concluding remark about differences in conceiving of kin relationships, on the one hand in unilineal descent groups (with their “kinship [as] notably built into relations of procreation”), and, on the other hand, within “cognition or kindred networks” (with their “active participation of people in each other’s existence”) (p. 87).

Perhaps, it might not be without interest to assess this “mutuality-of-being” as a content and “property” of kinship in the sphere of social relationships when accounted for in Romanian anthropology. Authors like Gheorghiță Geană² and Jean Cuisenier³ point out the cognatic character of kin terminology in

² Gheorghiță Geană, “Some Aspects of the Romanian Kinship”, *Annuaire Roumain d’Anthropologie*, 15, 1978, pp. 81-84.

³ Jean Cuisenier, *Le feu vivant. La parenté et ses rituels dans les Carpates*, Paris: Presses Universitaires de France, Paris, 1994.

Romania (with the use of a single term – *nepot* – both for grandsons and granddaughters, and for the sons / daughters of one's brother as well as sister, equally on paternal and maternal line). Another case of non-genealogical kinship is that of the symbolical relationships between *frați de sânge* or *surori de sânge* (blood brothers / sisters), as described by Octavian Buhociu⁴ and Paul Henri Stahl⁵. As part of the European Christian traditions, Romanian godparenthood – *nășie* – is an example of extending one's filial relatedness towards his or her "spiritual parents" due to their sponsorship in the moment when s/he gets married⁶.

⁴ Octavian Buhociu, *Folclorul de iarnă, ziorile și poezia păstorească*, București: Editura Minerva.

⁵ Paul Henri Stahl, « La consanguinité fictive, Quelques exemples balkaniques », *Quaderni Fiorentini per la Pensiero Giuridici Moderno*, Milano, 14, 1985, pp. 121-147.

⁶ Agnes Fine, *Parrains, marraines. La parenté spirituelle en Europe*, Paris: Librairie Anthème Fayard, 1994; Gheorghiu Geană, "Forms and Functions of the Romanian Spiritual Kinship", *Revue Roumaine des Sciences Sociales*, Série de philosophie et logique, tome 26 (1), 1980, pp. 79-84 ; Paul Henri Stahl, „Moșitul și nășitul. Transmisia lor în cadrul neamului”, *Revista de Etografie și Folclor*, XXXVIII (5), pp. 419-437.